7

Lines And Angle

7th Standard

Mathematics

Exam Time : 00:01:00 Hrs

Total Marks : 1

107 x 1 = 107

1) Angles which are both supplementary and vertically opposite are

(a) 95°,85° (b) 90°,90° (c) 100°,80° (d) 45°,45°

2) The angle, which makes a linear pair with an angle of 58° is of

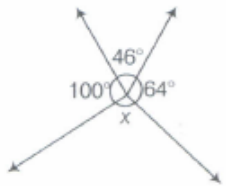
(a) 122° (b) 123° (c) 119° (d) 69°

3) The angles x - 10° and 190° - x are

(a) interior angles on the same side of the transversal (b) making a linear pair

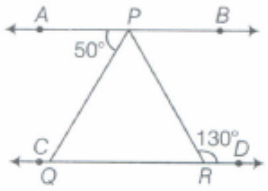
(c) complementary (d) supplementary

4) In the following figure, the value of x is



(a) 110° (b) 46° (c) 64° (d) 150°

5) In the following figure, if AB II CD, ∠APQ = 50° and ∠PRD = 130°, then ∠QPR is



(a) 130° (b) 50° (c) 80° (d) 30°

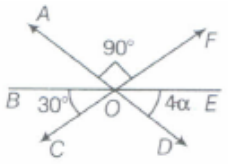
6) If two supplementary angles are in the ratio of 1 : 2, then the bigger angle is

(a) 120° (b) 125° (c) 110° (d) 90°

7) The measure of an angle, which is four times its supplement is

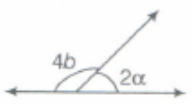
(a) 36° (b) 144° (c) 16° (d) 64°

8) In the following figure, the value of α is



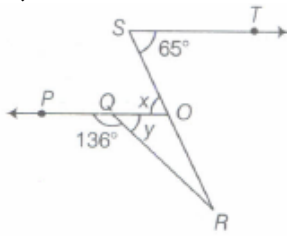
(a) 20° (b) 15° (c) 25° (d) 30°

9) In the following figure, α = 35°, then the value of b is



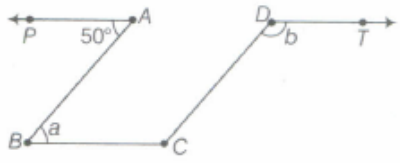
(a) 27.5 (b) 26.5 (c) 29 (d) 28.5

10) In the following figure, PQ II ST, then the value of x + y is



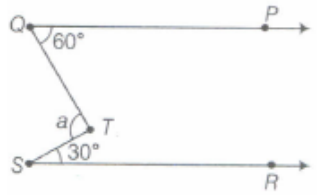
(a) 110° (b) 106° (c) 102° (d) 109°

11) In the given figure, if PA II BC IIDT and AB II DC, then the values of a and b are respectively



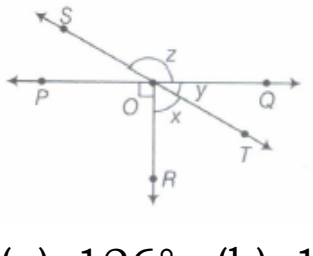
(a) 60° and 120° (b) 50° and 130° (c) 70° and 110° (d) 80° and 100°

12) In the given figure, if OP II SR, the value of a is



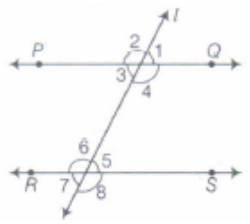
(a) 40° (b) 30° (c) 90° (d) 80°

13) In the given figure, lines PQ and ST intersect at O. If ∠ POR = 90° and x : y = 3 : 2, then z is equal to



(a) 126° (b) 144° (c) 136° (d) 154°

14) In the given figure, PQ II RS. If ∠ 1 = (2a + b)° and ∠ 6 = (3a - b)°, then the measure of ∠ 2 in terms of b is



(a) (2+b)° (b) (3-b)° (c) (108-b)° (d) (180-b)°

15) A ray has how many end points?

(a) one (b) two (c) three (d) zero

16) What is the sum of the measures of two supplementary angles?

(a) 90° (b) 180° (c) 360° (d) 270°

17) Assume figure, AB II CD and EFis the transversal. If angles AGH = 60°, what is the measure of angle DHF?

(a) 90° (b) 120° (c) 180° (d) 105°

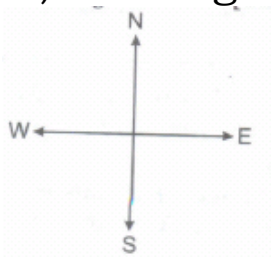
18) A line has how many end points?

(a) one (b) two (c) three (d) zero

19) What is the sum of the measures of two complementary angles?

(a) 90° (b) 120° (c) 180° (d) 105°

20) The angles between North and East and North and West are:

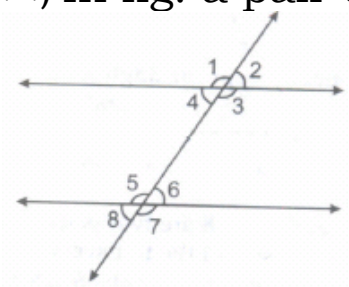


(a) complementary angles (b) supplementary angles (c) both acute angles (d) both obtuse angles

21) Which of the following pair of angles are supplementary?

(a) 48° ,42° (b) 60°,60° (c) 75°, 105 (d) 179°,2°

22) In fig. a pair of corresponding angles is:



(a) $\angle 1, \angle 2$ (b) $\angle 3, \angle 6$ (c) $\angle 3, \angle 5$ (d) $\angle 3, \angle 7$

23) If two lines are intersected by a transversal, then the number of pairs of interior angles on the same side of the transversal is:

(a) 1 (b) 2 (c) 3 (d) 4

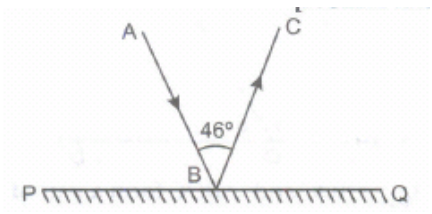
24) The angles between North and West and South and East are:

(a) complementary (b) supplementary (c) both are acute (d) both are obtuse

25) Angles between South and West and South and East are:

(a) vertically opposite angles (b) complementary angles (c) making a linear pair (d) adjacent but not supplementary

26) PQ is a mirror, AB is the incident ray and BC is the reflected ray. If $\angle ABC = 46^0$ then $\angle ABP$ is equal to:



(a) 44° (b) 67° (c) 13° (d) 62°

27) If the complement of an angle is 79°,then the angle will be of:

(a) 1° (b) 11° (c) 79° (d) 101°

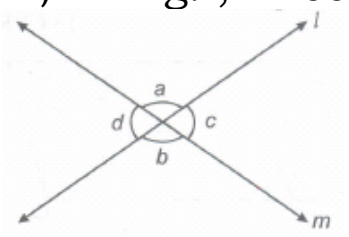
28) The angle which makes a linear pair with an angle of $61^0$is of:

(a) 29° (b) 61° (c) 122° (d) 199°

29) The angles x and 90°- x are:

(a) supplementary (b) complementary (c) vertically opposite (d) making a linear pair

30) In Fig. , lines l and m intersect each other at a point. Which of the following is false?

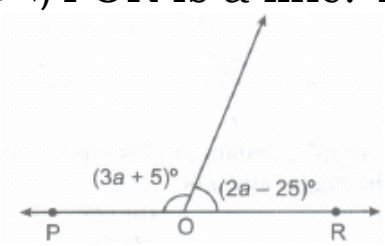


(a) $\angle a = \angle b$ (b) $\angle d = \angle c$ (c) $\angle a = \angle d = 180^0$ (d) $\angle a = \angle d$

31) If angle P and angel Q are supplementary and the measure of angles p is 60°, then the measure of angle Q is:

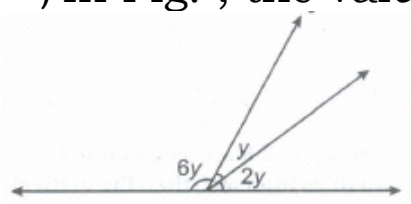
(a) 120° (b) 60° (c) 30° (d) 20°

32) POR is a line. The value of a is:



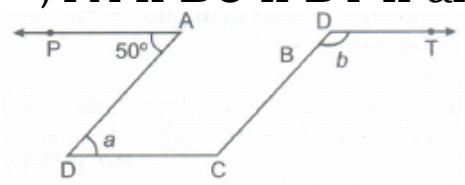
(a) 40° (b) 45° (c) 55° (d) 60°

33) In Fig. , the value of y is



(a) 30° (b) 15° (c) 20° (d) 22.5^0

34) PA II BC II DT II and AB II DC. Then, the values of a and b are respectively.



(a) 60° ,30° (b) 50° , 130° (c) 70° , 110^0 (d) 80° ,100°

35) The difference of two complementary angles is 30°. Then, the angles are:

(a) 60° ,30° (b) 70° ,40° (c) 20° ,150° (d) 105° , 75°

36) In Fig. ,PQ II SR and SP II RQ. Then, angles a and b are respectively:

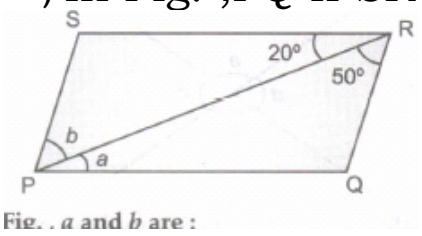
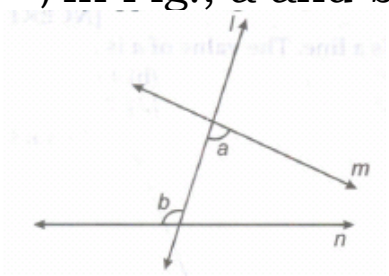


Fig. , *a* and *b* are :

(a) 20°,50° (b) 50°, 120° (c) 30°, 50° (d) 45°, 35°

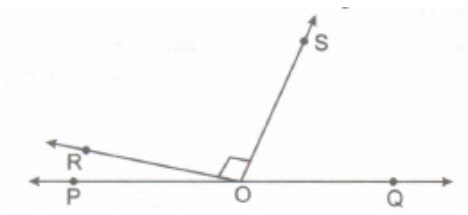
37) In Fig., a and b are:



(a) alternate exterior angles (b) corresponding angles (c) alternate interior angles

(d) vertically opposite angles

38) In fig., ROS is a right angle and POR and QOS are in the ratio 1: 5. Then QOS measures:



(a) 150° (b) 75° (c) 45° (d) 60°

39) Statements a and b are as given below:

a: If two lines intersect, then the vertically opposite angles are equal.

b: If a transversal intersects, two other lines, then the sum of two interior angles on the same side of the transversal is 180°.

Then

(a) Both a and b are true (b) a is true and b is false (c) a is false and b is true

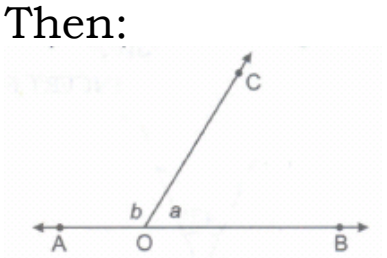
(d) both a and b are false

40) For Fig., statements p and q are given below:

p: a and b are forming a linear pair.

q: a and b are forming a pair of a adjacent angles.

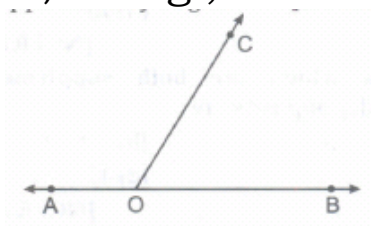
Then:



(a) both p and q are true (b) p is true and q is false (c) p is false and q is true

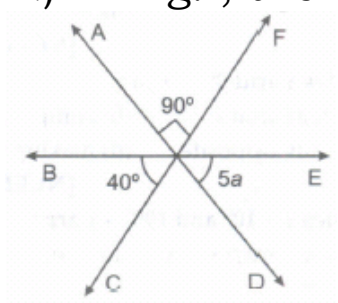
(d) both p and q are false

41) In Fig., $\angle AOC$ *and* $\angle BOC$ form a pair of :



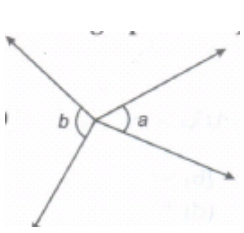
(a) vertically opposite angles (b) complementary angles (c) alternate interior angles
(d) supplementary angles

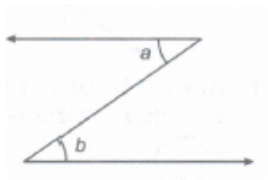
42) In Fig. , the value of a is:

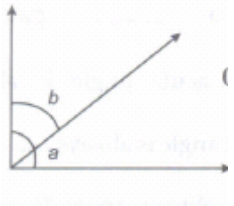


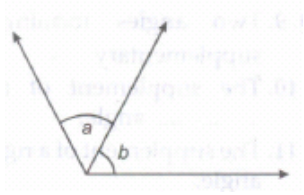
(a) 20° (b) 15° (c) 5° (d) 10°

43) In which of the following figures, a and bare forming a pair of adjacent angles?

(a) 

(b) 

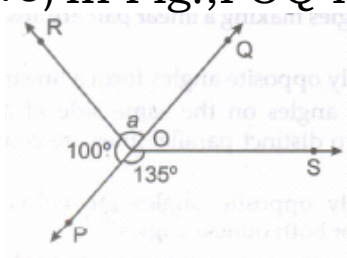
(c) 

(d) 

44) In a pair of adjacent angles, (i) vertex is always common, (ii) one arm is always common and (iii) uncommon arms are always opposite rays:
Then

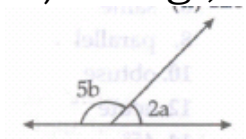
(a) All (i), (ii) and (iii)are true (b) (iii) is false (c) (i) is false but (ii) and (iii) are true
(d) (ii) is false

45) In Fig.,POQ is a line, then a is equal to:



(a) 35° (b) 100° (c) 80° (d) 135°

46) In Fig., a = 40°. The value of b is :

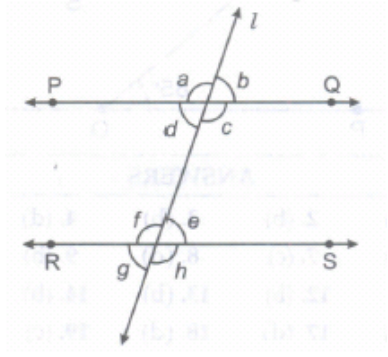


(a) 20° (b) 24° (c) 36° (d) 120°

47) If an angle is 60° less than two times of its supplement, then the greater angle is:

(a) 100^0 (b) 80° (c) 60^0 (d) 120°

48) In Fig., PQIIRS and a: b = 3: 2. Then, f is equal to:

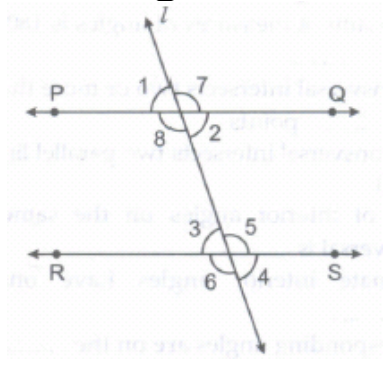


(a) 36° (b) 108^0 (c) 72° (d) 144°

49) In Fig., line l intersects two parallel lines PQ and RS. Then, which one of the following is not true?

(a) $\angle 1 = \angle 3$ (b) $\angle 2 = \angle 4$ (c) $\angle 6 = \angle 7$ (d) $\angle 4 = \angle 8$

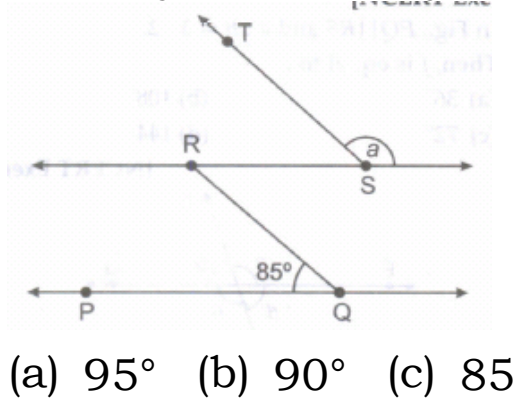
50) If Fig. , which one of the following is not true?



(a) $\angle 1 + \angle 5 = 180^0$ (b) $\angle 2 + \angle 5 = 180$ (c) $\angle 3 + \angle 8 = 180^0$

(d) $\angle 2 + \angle 3 = 180^0$

51) If PQ II RS and QR II TS, then the value of a is :



(a) 95° (b) 90° (c) 85 (d) 75°

52) The sum of two complementary angles is:

(a) 90° (b) 180° (c) 360° (d) Any angle between 180° and 360°

53) The sum of two supplementary angles is:

(a) 90° (b) 180° (c) 360° (d) Any angle between 180° and 360°

54) Which of the following angle is equal to its complement?

(a) 36° (b) 108° (c) 90° (d) 45°

55) Which of the following angle is half of its supplement?

(a) 120° (b) 60° (c) 30° (d) 90°

56) Which of the following pairs can form a linear pair?

(a) Pair of complementary angles (b) Pair of supplementary angles

(c) Pair of adjacent angles (d) Pair of vertically opposite angles

57) The angle. which is its own supplement:

(a) 0° (b) 45° (c) 90° (d) does not exist

58) If a transversal intersects two parallel lines. then the interior angles on the same side of the transversal are:

(a) vertically opposite angles (b) complementary angles (c) supplementary angles

(d) alternate angles

59) If two lines are perpendicular to the same line. then they are:

(a) perpendicular to each other (b) parallel to each other

(c) either parallel to each other or perpendicular to each other (d) intersecting lines.

60) Vertically opposite angles are always:

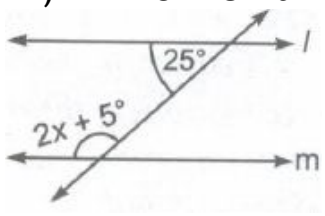
(a) equal to each other (b) supplementary (c) complementary

(d) unequal to each other

61) In a linear pair of angles. one angle is $\frac{2}{3}$ of the other. The measure of the smaller angle is:

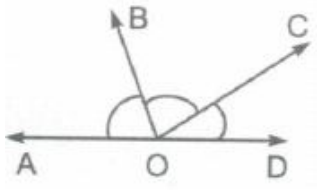
(a) 108° (b) 72° (c) 36° (d) 54°

62) Which of the following is a pair of complementary angles?



(a) 10° and 170° (b) 80° and 10° (c) 110° and 80° (d) 10° and 70°

63) In the figure, if ∠AOB : ∠BOC: ∠COD = 2:3:1, then the measure of the ∠COD is:



(a) 30° (b) 60° (c) 90° (d) 15°

64) If (5x - 1) ° and (5x - 19)° form a linear pair, then x is:

(a) 99° (b) 81° (c) 11° (d) 20°

65) When the sum of the measures of two angles is 90°, the angles are called

(a) supplementary angles (b) complementary angles (c) adjacent angles (d) vertically opposite angles

66) The measure of the complement of the angle 30° is

(a) 30° (b) 15° (c) 60° (d) 150°

67) Which of the following statements is true?

(a) Two acute angles can be complementary to each other

(b) Two obtuse angles can be complementary to each other

(c) Two right angles can be complementary to each other

(d) One obtuse angle and one acute angle can be complementary to each other.

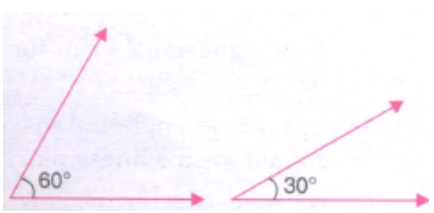
68) The measure of the complement of the angle 45° is

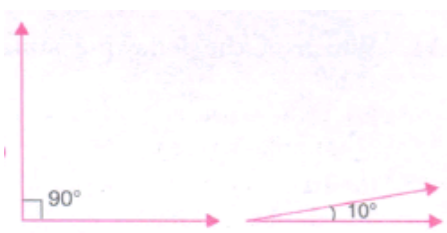
(a) 90° (b) 45° (c) 15° (d) 135°

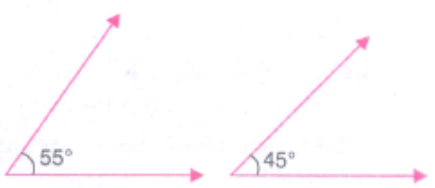
69) What is the measure of the complement of the angle 80°?

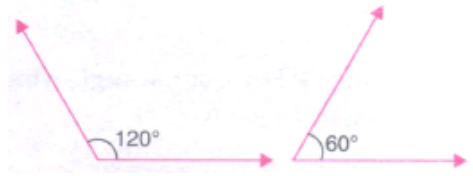
(a) 10° (b) 100° (c) 35° (d) 20°

70) Which pair of the following angles are complementary?

(a) 

(b) 

(c) 

(d) 

71) The measure of the angle which is equal to its complement is

(a) 30° (b) 60° (c) 45° (d) 90°

72) Which of the following pairs of angles is not a pair of complementary angles?

(a) 60°, 30° (b) 56°, 34° (c) 0°, 90° (d) 150°, 30°

73) What is the measure of the complement of the angle 90°?

(a) 90° (b) 0° (c) 180° (d) 45°

74) When the sum of the measures of two angles is 180°, the angles are called

(a) adjacent angles (b) complementary angles (c) vertically opposite angles (d) supplementary angles

75) The measure of the supplement of the angle 120° is

(a) 30° (b) 45° (c) 60° (d) 90°

76) Which of the following statements is true?

(a) Two acute angles can be supplementary

(b) Two right angles can be supplementary

(c) Two obtuse angles can be supplementary

(d) One obtuse angle and one acute angle cannot be supplementary

77) The measure of the supplement of the angle 90° is

(a) 45° (b) 60° (c) 30° (d) 90°

78) The measure of the angle which is equal to its supplement is

(a) 30° (b) 45° (c) 90° (d) 60°

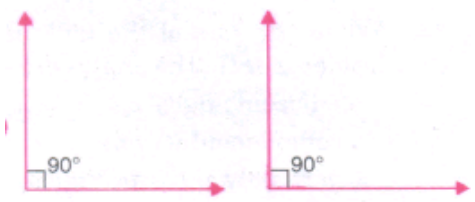
79) Which of the following pairs of angles is not a pair of supplementary angles?

(a) 90°, 90° (b) 32°, 58° (c) 0°, 180° (d) 76°, 104°

80) What is the measure of the supplement of the angle 0°?

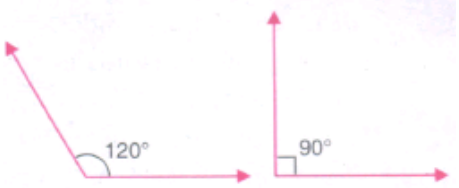
(a) 45° (b) 90° (c) 120° (d) 180°

81) Which pair of the following angles are not supplementary?

(a) 

(b) 

(c) 

(d) 

82) The measure of the supplement of the angle 179° is

(a) 1° (b) 2° (c) 3° (d) 4°

83) Which of the following statements is true?

(a) Two adjacent angles can be complementary.

(b) Two adjacent angles cannot be supplementary

(c) An acute angle cannot be adjacent to an obtuse angles

(d) Two right angles cannot be adjacent angles

84) The angles in a linear pair are

(a) complementary (b) supplementary (c) not adjacent angles

(d) vertically opposite angles

85) Which of the following statements is true?

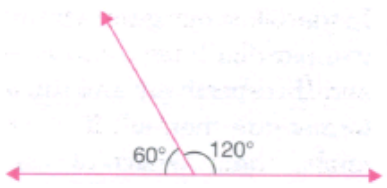
(a) Two acute angles can form a linear pair

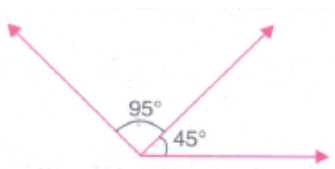
(b) Two obtuse angles can form a linear pair

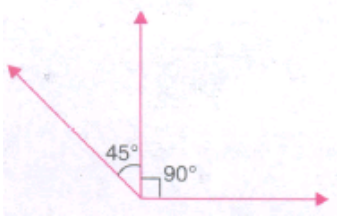
(c) Two right angles can form a linear pair

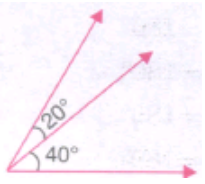
(d) One obtuse angle and one acute angle cannot form a linear pair

86) Which of the following pairs of angles form a linear pair?

(a) 

(b) 

(c) 

(d) 

87) The sum of the measures of the angles in a linear pair is

(a) 90° (b) 180° (c) 360° (d) none of these

88) Which of the following statements is false?

(a) Two vertically opposite angles can be acute

(b) Two vertically opposite angles can be obtuse

(c) Two vertically opposite angles can be right angles

(d) Two vertically opposite angles may be unequal

89) Which of the following statements is false?

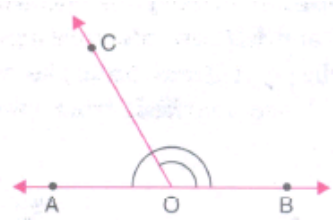
(a) When a transversal cuts two parallel lines, each pair of corresponding angles are equal

(b) When a transversal cuts two parallel lines, each pair of alternate interior angles are equal

(c) When a transversal cuts two parallel lines, each pair of interior angles on the same side of the transversal are supplementary

(d) A transversal cuts two parallel lines in three points

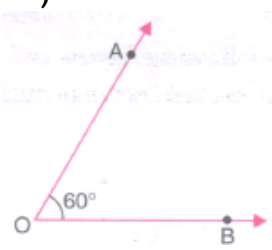
90) In the following figure, $\angle AOB$ and $\angle BOC$ are



(a) complementary angles (b) supplementary angles (c) adjacent angles

(d) none of these

91) In the following figure, reflex $\angle AOB$ is equal to



(a) 60° (b) 120° (c) 300° (d) 360°

92) Which of the following statements is false?

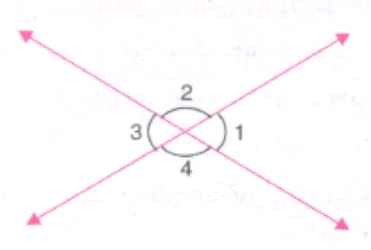
(a) When a transversal cuts two lines, such that pairs of corresponding angles are equal, then the lines have to be parallel

(b) When a transversal cuts two lines such that pairs of alternate interior angles are equal, then the lines have to be parallel

(c) When a transversal cuts two lines such that pairs of interior angles on the same side of the transversal are supplementary, then the lines have to be parallel

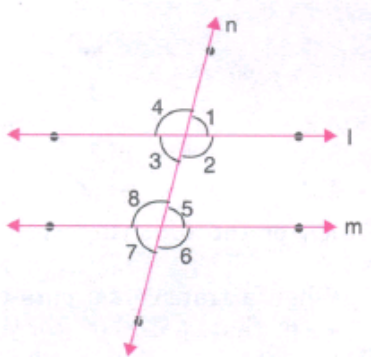
(d) When a transversal cuts two lines such that pairs of interior angles on the same side of the transversal are complementary, then the lines have to be parallel

93) In the following figure, two straight lines AB and CD are intersecting each other at the point O and the angles thus formed at O are marked, then the value of $\angle x - \angle y$ is



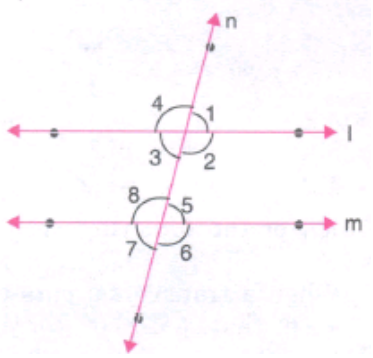
(a) 56° (b) 118° (c) 62° (d) 180°

94) In the following figure, tell which pair of angles are not corresponding angles?



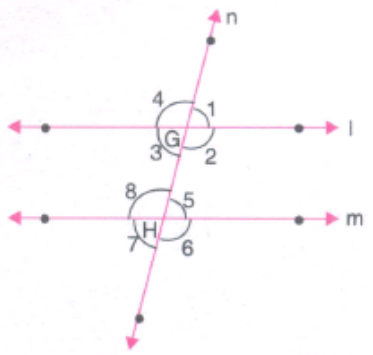
(a) $\angle 1, \angle 5$ (b) $\angle 2, \angle 6$ (c) $\angle 3, \angle 7$ (d) $\angle 3, \angle 5$

95) See the figure given. Which pair of angles are alternate interior angles?



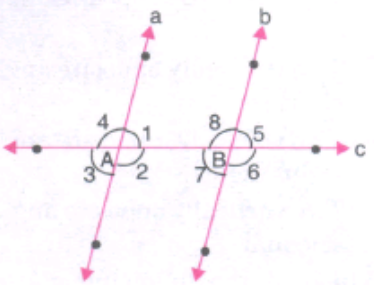
(a) $\angle 1, \angle 5$ (b) $\angle 2, \angle 6$ (c) $\angle 3, \angle 7$ (d) $\angle 3, \angle 5$

96) In the following figure, a transversal cuts two parallel lines land m at points G and H respectively and the angles thus formed are marked. If $\angle 1$ is an acute angle, then, which of the following statements is false?



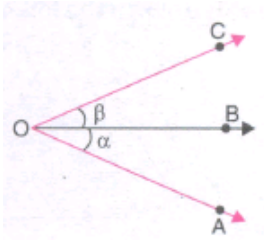
(a) $\angle 1 + \angle 2 = 180^\circ$ (b) $\angle 2 + \angle 5 = 180^\circ$ (c) $\angle 3 + \angle 8 = 180^\circ$
(d) $\angle 2 + \angle 6 = 180^\circ$

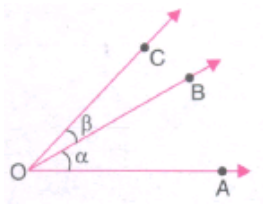
97) In the following figure, a transversal c intersects two parallel lines a and b at A and B respectively and the angles formed at A and B are marked. Tell which of the following pairs of angles need not be equal?

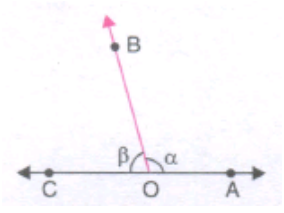


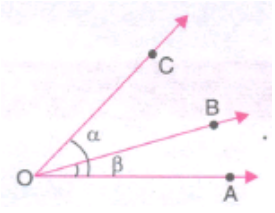
(a) $\angle 1, \angle 2$ (b) $\angle 1, \angle 3$ (c) $\angle 1, \angle 6$ (d) $\angle 2, \angle 8$

98) Which of the following pairs of angles are not adjacent angles?

(a) 

(b) 

(c) 

(d) 

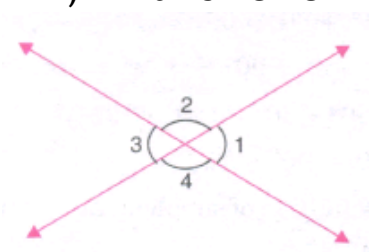
99) Find the measure of the angle which is double of its complementary angle?

(a) 60° (b) 30° (c) 45° (d) 120°

100) Find the measure of the angle which is half of its supplementary angle?

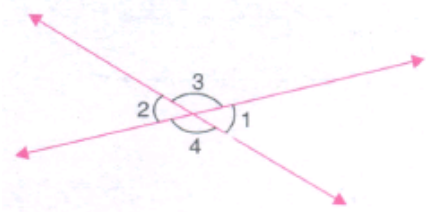
(a) 60° (b) 120° (c) 90° (d) 45°

101) In the following figure, if $\angle 1 + \angle 3 = 120^\circ$, then $\angle 2 + \angle 4$ is equal to



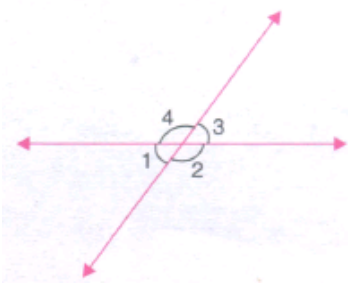
(a) 60° (b) 120° (c) 240° (d) 80°

102) In the following figure, if $\angle 1 + \angle 2 = 100^\circ$, then the measure of $\angle 4$ is equal to



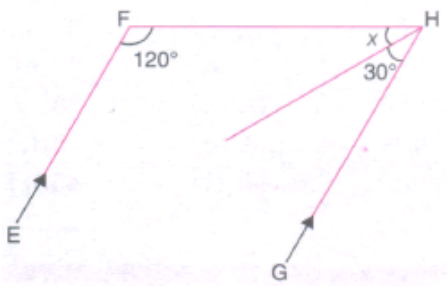
(a) 50° (b) 100° (c) 80° (d) 130°

103) In the following figure, $\angle 1 + \angle 2 + \angle 3 = 230^\circ$, then the measure of $\angle 4$ is equal to



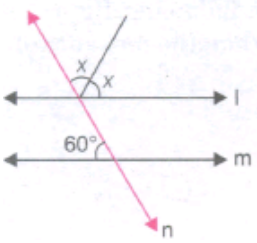
(a) 130° (b) 80° (c) 65° (d) 90°

104) In the following figure EF II GR. Then, the measure of $\angle x$ is equal to



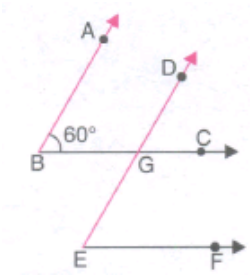
(a) 30° (b) 45° (c) 60° (d) 40°

105) In the following figure, l || m. Find the measure of $\angle x$.



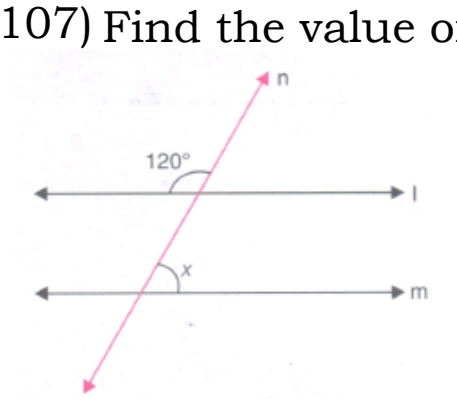
(a) 60° (b) 45° (c) 30° (d) none of these

106) In the following figure, AB || DG and BC || EF. Also, $\angle ABC = 60^\circ$. Then, the measure of $\angle DEF$ is



(a) 30° (b) 60° (c) 45° (d) 120°

107) Find the value of x in the following figure, if l || m.



(a) 30° (b) 45° (c) 60° (d) none of these

108) If two angles are complementary, then the sum of their measures is _____

109) If two angles are supplementary, then the sum of their measures is _____

110) Two angles forming a linear pair are _____

111) If two adjacent angles are supplementary, then they form a _____

112) If two lines intersect at a point, then the vertically opposite angles are always _____

113) If two lines intersect at a point and one pair of vertically opposite angles are acute angles, then the other pair of vertically opposite angles are _____

114) If sum of measures of two angles is 90°, then the angles are _____

115) If sum of measures of two angles is 180°, then they are _____

116) Sum of interior angles on the same side of a transversal is _____

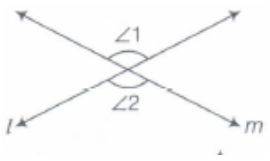
117) An angle is 45°. Its complementary angle will be _____

118) An angle which is half of its supplement is _____

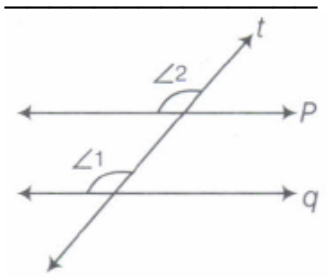
119) The supplement of an acute is always _____ angle.

120) The supplement of a right angle is always _____ angle.

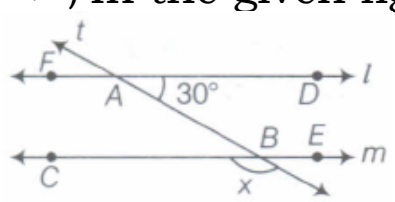
121) In the adjacent figure, if I and m are two straight lines, then ∠1 and ∠2 are _____ angles.



122) In the given figure, if p and q are two parallel lines then, ∠1 and ∠2 are _____ angles.



123) In the given figure, the value of x = _____



124) A transversal intersects two or more than two lines at_____points. If a transversal intersects two parallel lines, then

125) Alternate interior angles have one common_____.

126) Corresponding angles are on the_____side of the transversal.

127) Alternate interior angles are on the_____side of the transversal.

128) Two lines in a plane which do not meet at a point anywhere are called____lines.

129) The supplement of an acute angle is always_____angle.

130) The supplement of an obtuse angle is always_____angle.

131) In a pair of complementary angles, each angle cannot be more than_____.

132) Two angles are said to be_____if the sum of their measures is 90°.

133) Two angles are said to be_____if the sum of their measures is 180°.

134) If a ray stands on a line, then the sum of the adjacent angles so formed is _____.

135) The sum of all the angles around a point is_____.

136) The complement of 15° is_____.

137) The complement of 89° is_____.

138) The _____ of 10° is 170°.

139) The _____ of 179° is 1°.

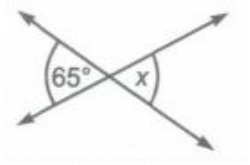
140) The sum of two angles in a linear pair is _____.

141) Two adjacent angles have a common_____ and a common vertex.

142) Vertically opposite angles are _____.

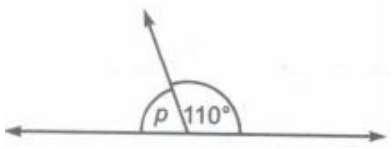
143) If the sum of two angles is 180°, then each is the _____ of the other.

144)



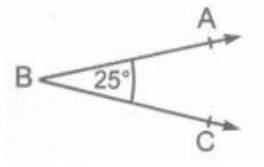
∠ x=_____.

145)



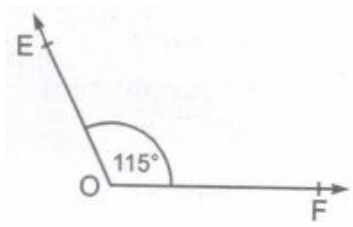
∠ P=_____.

146)



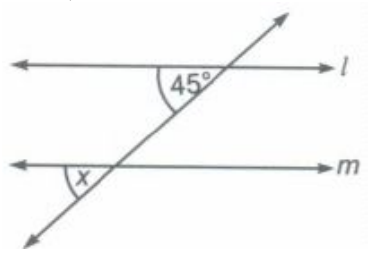
Complement of ∠ ABC = _____.

147)



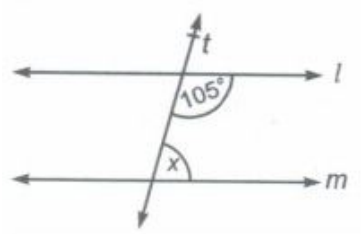
Supplement of ∠ EOF = _____.

148) Look at the following figures and fill in the blanks [l and m are parallel].



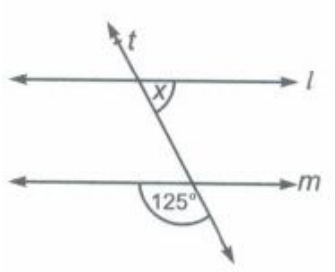
∠ x=_____.

149) Look at the following figures and fill in the blanks [l and m are parallel].



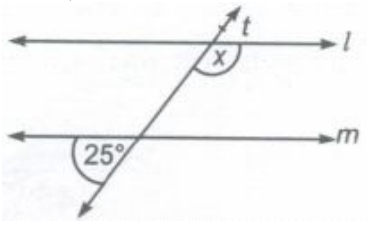
∠ x=_____.

150) Look at the following figures and fill in the blanks [l and m are parallel].



∠ x=_____.

151) Look at the following figures and fill in the blanks [l and m are parallel].



∠ x_____.

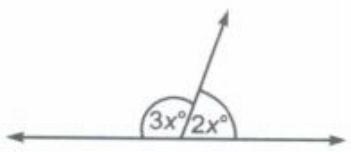
152) Two _____ adjacent angles form a linear pair.

153) If the sum of the measures of two angles is 90°, then each one of them is the_____of the other.

154) If the sum of the measure of two angles is 180°, then each one of them is the ____ of the other.

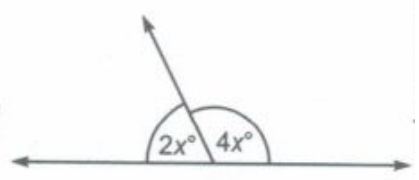
155) The vertically opposite angle to 75° is_____.

156)



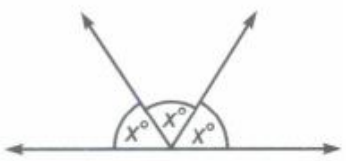
x^o=_____.

157)



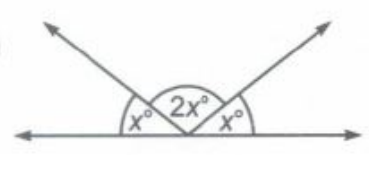
x^o=_____.

158)



x^o=_____.

159)



x^o=_____.

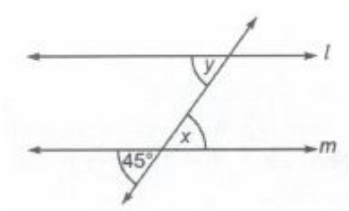
160) Parallel lines are always. [equal / equidistant]

161) If two parallel lines are intersected by a transversal, then a pair of alternate angles are _____. [equal/complementary]

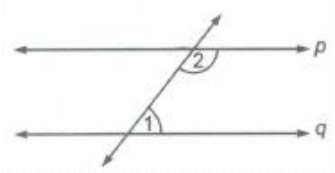
162) If two parallel lines are intersected by a transversal, then a pair of corresponding angles are _____. [equal/supplementary]

163) If two parallel lines are intersected by a transversal, then the interior opposite angles are _____. [supplementary complementary]

164) In the figure, 1 | | m, then x = y = _____.[45°/135°]

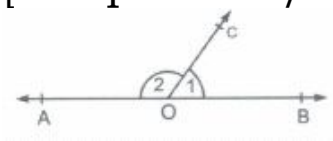


165) If p and q are parallel, then ∠ 1 +∠ 2 =_____.[90°/180°]

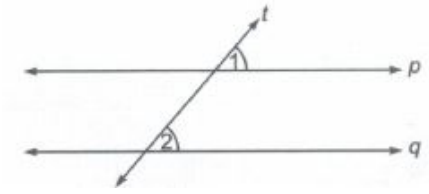


166) If AB ⊥ CD, then ∠ 1 and ∠ 2 are _____ to each other.[complement/supplement]

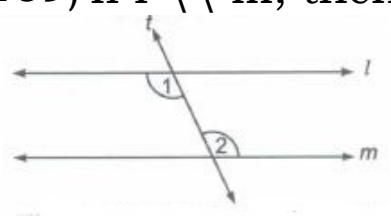
167) If AB is a straight line, then ∠ 1 and ∠ 2 are _____ to each other. [complement/supplement]



168) If P \\ q, then L 1 and L2 form a pair of ____ angles. [alternate!corresponding]

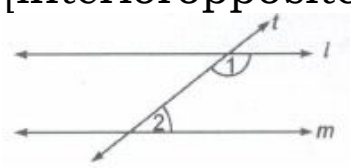


169) If I \\ m, then ∠ 1 and ∠2 form a pair of angles. [alternatelcorresponding]



170) If I and m are two straight lines, then ∠ 1 and ∠ 2 are _____ angles. [interioropposite/verticallyopposite]

171) If I and m are two parallel lines, then ∠ 1 and ∠ 2 are angles.
[interioropposite/verticallyopposite]



19 x 1 = 19

172) Two right angles are complementary to each other.
(a) True (b) False

173) One obtuse and one acute angle can make a pair of complementary angles.
(a) True (b) False

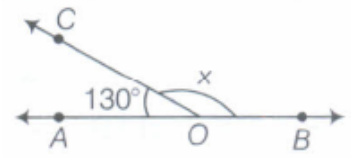
174) Two supplementary angles are always obtuse angle.
(a) True (b) False

175) Two right angles are always supplementary to each other.
(a) False (b) True

176) An angle is more than 45°. Its complementary angle must be less than 45°.
(a) False (b) True

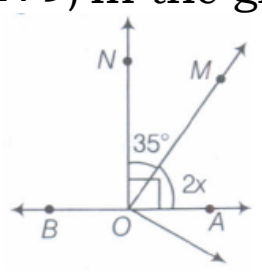
177) Vertically opposite angles are either both acute angles or both obtuse angles.
(a) False (b) True

178) In the given figure, the value of x is 30°.



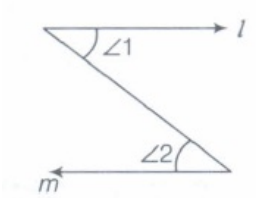
(a) True (b) False

179) In the given figure, the value of x is equal to 27.5



(a) False (b) True

180) In the given figure, the values of ∠ 1 and ∠ 2 are equal.



(a) False (b) True

181) Both angles of a pair of supplementary angles can never be acute angles.
(a) False (b) True

182) Interior angles on the same side of a transversal with two distinct parallel lines are complementary angles.
(a) True (b) False

183) One obtuse angle and one acute angle can make a pair of complementary angles.
(a) True (b) False

184) One obtuse angle and one acute angle can make a pair of supplementary angles.
(a) False (b) True

185) Two supplementary angles always from a linear pair.
(a) False (b) True

186) Two angles making a linear pair are always supplementary.
(a) False (b) True

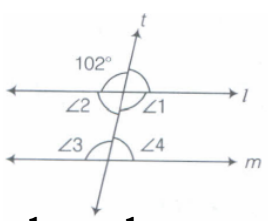
187) Two angles making a linear pair are always adjacent angles.
(a) False (b) True

188) Vertically opposite angles form a linear pair.
(a) True (b) False

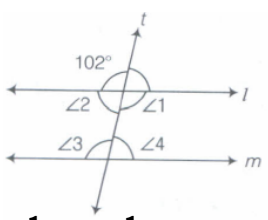
189) A linear pair may have two acute angles.
(a) True (b) False

190) Two adjacent angles always form a linear pair.
(a) True (b) False

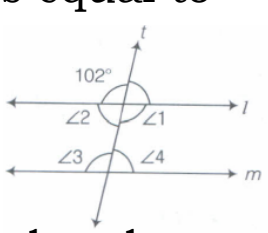
12 x 1 = 12

191) Complement of 32° (1) 48°
192) Complement of 42° (2) x = 70°
193) Supplement of 80° (3) 100°
194) Supplement of 81° (4) 102°
195) 

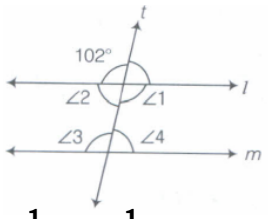
Lines l and m are parallel to each other, where line t is transversal line.
∠ 1 is equal to (5) x = 40°

196) 

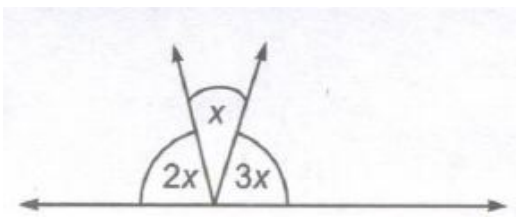
Lines l and m are parallel to each other, where line t is transversal line.
∠ 2 is equal to (6) x = 50°

197) 

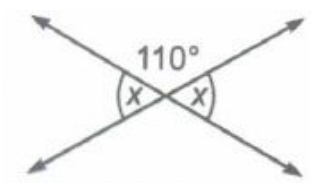
Lines l and m are parallel to each other, where line t is transversal line.
∠ 3 is equal to (7) x = 30°

198) 

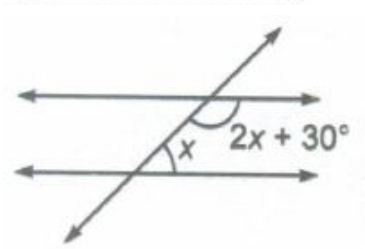
Lines l and m are parallel to each other, where line t is transversal line.
∠ 4 is equal to (8) 78°

199) 

(9) 58°

200) 

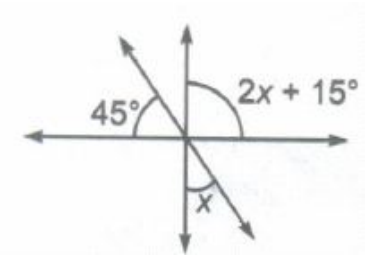
(10) 99°

201) 

(11) 78°

(12) 102°

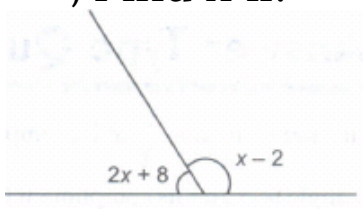
202)



39 x 1 = 39

203) Find the angle which is $\frac{2}{3}$ of its complement.

204) Find x if:



205) What is the sum of two angles forming a linear pair?

206) What is common in vertically opposite angles?

207) Can two acute angles form a pair of supplementary angles?

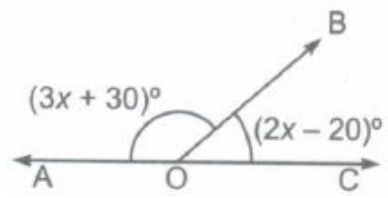
208) Can the vertically opposite angles of an obtuse angle be an acute angle?

209) What is the difference between the supplementary and the complementary angle?

210) Find an angle which is $\frac{1}{4}$ the of its supplement.

211) Find an angle which is $\frac{1}{8}$ the of its complement.

212) What value of x will make $\angle$ AOB and $\angle$ BOC a linear pair?



213) Find the complement of each of the following angles:31°

214) Find the complement of each of the following angles:41°

215) Find the complement of each of the following angles:73°

216) Find the complement of each of the following angles:56°

217) Find the complement of each of the following angles:60°

218) Find the complement of each of the following angles:50°

219) Find the complement of each of the following angles:72^0

220) Find the complement of each of the following angles:89°

221) Find the supplement of each of the following angles:71°

222) Find the supplement of each of the following angles:51°

223) Find the supplement of each of the following angles:136°

224) Find an angle which is half of its complement.

225) Find which of the following pairs of angles are complementary and which are supplementary?
29^0 and 61^0

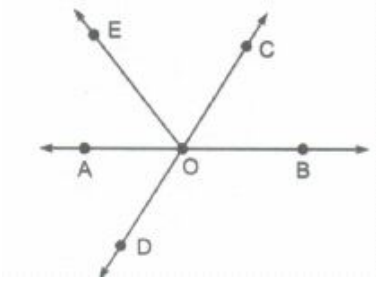
226) Find which of the following pairs of angles are complementary and which are supplementary?
64^0 and 116^0

227) Find which of the following pairs of angles are complementary and which are supplementary?
75^0 and 15^0

228) Find which of the following pairs of angles are complementary and which are supplementary?
85^0 and 5^0

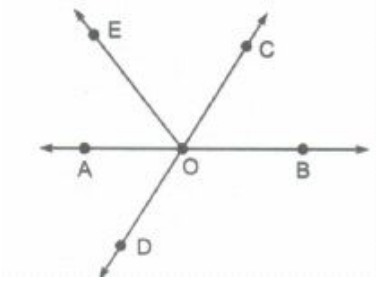
229) Find which of the following pairs of angles are complementary and which are supplementary?
43^0 and 137^0

230) In the figure, identify:



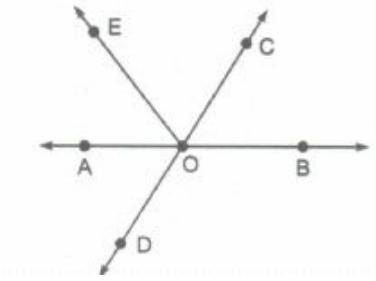
Two pairs of vertically opposite angles

231) In the figure, identify :



Three linear pairs

232) In the figure, identify:



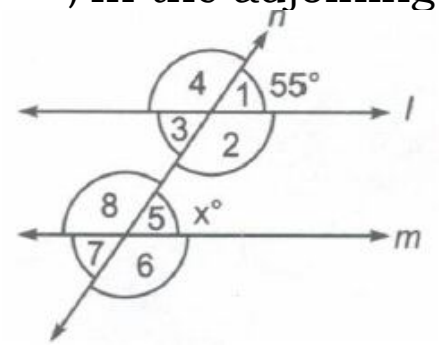
Five pairs of adjacent angles.

233) A transversal is a line that intersects two or more lines at _____points.

234) When a transversal intersects two parallel lines, then each pair of corresponding angles are_____.

235) If a pair of interior angles on the same side of the transversal is supplementary, then the lines are_____.

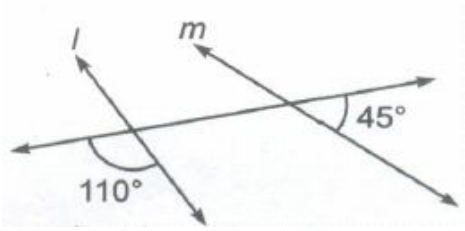
236) In the adjoining figure, if l || m and n is a transversal, then x =_____.



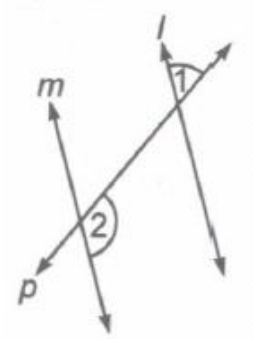
237) If two lines are intersected by a transversal such that corresponding angles are equal then the given lines are_____.

238) In the above figure, if $\angle 1 = 30°$, then find the measures of other angles ($\angle 2$ to $\angle 8$) such that l || m.

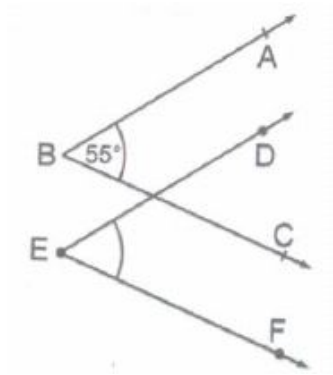
239) In the adjoining figure, is l || m?



240) In the following figure, l || m and p is a transversal, then find the measure of $\angle 2$ such that $\angle 1 = 40°$.



241) In the following figure, the anus of the angles are parallel. If ∠ ABC = 55°, then find ∠ DEF.



164 x 2 = 328

242) Can two acute angles be complement to each other?

243) Can two obtuse angles be complement to each other?

244) Can two right angles be complement to each other?

245) What is the measure of the complement of each of the following angles? 45°

246) What is the measure of the complement of each of the following angles? 65°

247) What is the measure of the complement of each of the following angles? 41 °

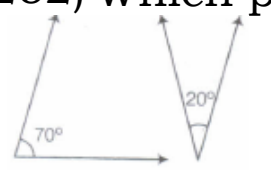
248) What is the measure of the complement of each of the following angles? 54°

249) Can two obtuse angles be supplementary?

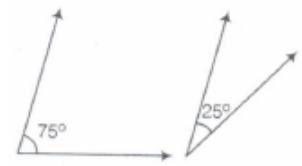
250) Can two acute angles be supplementary?

251) Can two right angles be supplementary?

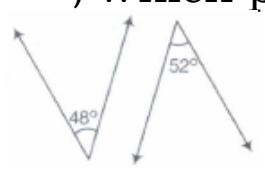
252) Which pairs of the following angles are complementary?



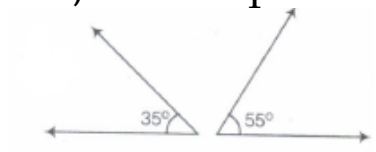
253) Which pairs of the following angles are complementary?



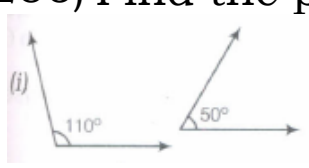
254) Which pairs of the following angles are complementary?



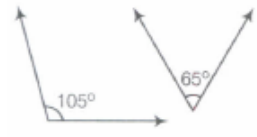
255) Which pairs of the following angles are complementary?



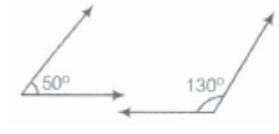
256) Find the pairs of supplementary angles in the question figure.



257) Find the pairs of supplementary angles in the question figure.



258) Find the pairs of supplementary angles in the question figure.



259) Find the pairs of supplementary angles in the question figure.

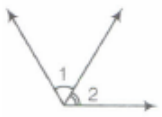
260) What will be the measure of the supplement of each one of the following angles? 100°

261) What will be the measure of the supplement of each one of the following angles? 90°

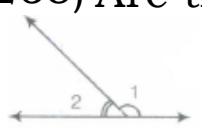
262) What will be the measure of the supplement of each one of the following angles? 55°

263) What will be the measure of the supplement of each one of the following angles? 125°

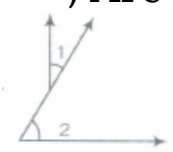
264) Are the angles marked 1 and 2 in figure adjacent? If they are not adjacent, say 'why',



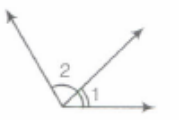
265) Are the angles marked 1 and 2 in figure adjacent? If they are not adjacent, say 'why',



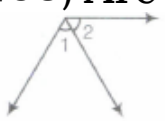
266) Are the angles marked 1 and 2 in figure adjacent? If they are not adjacent, say 'why',



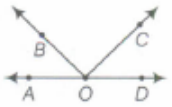
267) Are the angles marked 1 and 2 in figure adjacent? If they are not adjacent, say 'why',



268) Are the angles marked 1 and 2 in figure adjacent? If they are not adjacent, say 'why',

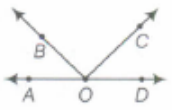


269) In the adjoining figure, which of the following are adjacent angles?
∠ AOB and ∠ BOC



Justify your answer.

270) In the adjoining figure, which of the following are adjacent angles?
∠ BOD and ∠ BOC



Justify your answer.

271) Can two adjacent angles be supplementary?

272) Can two adjacent angles be complementary?

273) Can two obtuse angles be adjacent angles?

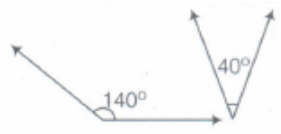
274) Can an acute angle be adjacent to an obtuse angle?

275) Can two acute angles form a linear pair?

276) Can two obtuse angles form a linear pair?

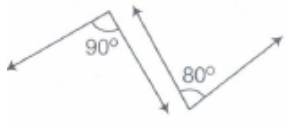
277) Can two right angles form a linear pair?

278) Check which of the following pairs of angles form a linear pair in the figure?



279) Check which of the following pairs of angles form a linear pair in the figure?

280) Check which of the following pairs of angles form a linear pair in the figure?



281) Check which of the following pairs of angles form a linear pair in the figure?

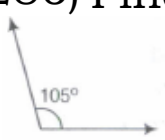
282) Give an example for vertically opposite angles in your surroundings.

283) Find the complement of each of the following angles.

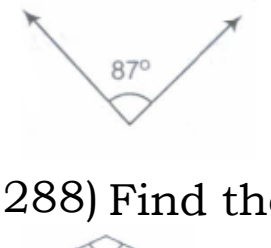
284) Find the complement of each of the following angles.

285) Find the complement of each of the following angles.

286) Find the supplement of each of the following angles.



287) Find the supplement of each of the following angles.



288) Find the supplement of each of the following angles.

289) Identify which of the following pairs of angles are complementary and which are supplementary? 65°, 115°

290) Identify which of the following pairs of angles are complementary and which are supplementary? 63°, 27°

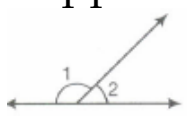
291) Identify which of the following pairs of angles are complementary and which are supplementary? 112°, 68°

292) Identify which of the following pairs of angles are complementary and which are supplementary? 130°, 50°

293) Identify which of the following pairs of angles are complementary and which are supplementary? 45°,45°

294) Identify which of the following pairs of angles are complementary and which are supplementary? 80°, 10°

295) In the adjoining figure, $\angle$ 1 and $\angle 2$ are supplementary angles. If $\angle 1$ is decreased, what changes should $\angle 2$ take place in $\angle 2$, so that both the angles still remain supplementary.



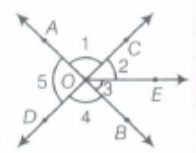
296) Can two angles be supplementary, if both of them are acute?

297) Can two angles be supplementary, if both of them are obtuse?

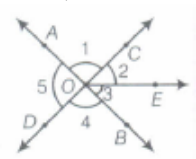
298) Can two angles be supplementary, if both of them are right?

299) An angle is greater than 45°. Is its complementary angle greater than 45° or equal to 45° or less than 45°?

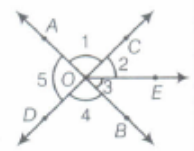
300) In the adjoining figure, Is $\angle 1$ adjacent to $\angle 2$?



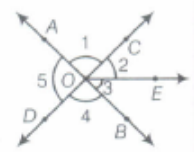
301) In the adjoining figure, Is $\angle$AOC adjacent to $\angle$AOE?



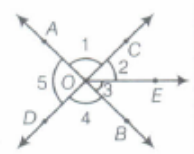
302) In the adjoining figure, Do $\angle$ COE and $\angle$ EOD form a linear pair?



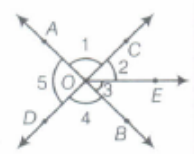
303) In the adjoining figure, Are $\angle$ BOD and $\angle$ DOA supplementary?



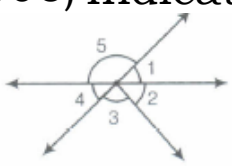
304) In the adjoining figure, Is $\angle$ 1 vertically opposite to $\angle$ 4?



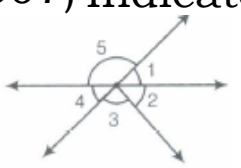
305) In the adjoining figure,What is the vertically opposite angle of $\angle$ 5?



306) Indicate which pairs of angles are vertically opposite angles?

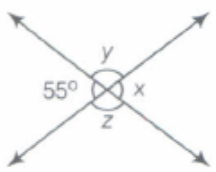


307) Indicate which pairs of angles are linear pairs?

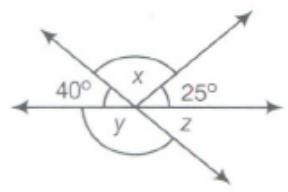


308) In the following figure, is $\angle$ 1 adjacent to $\angle$ 2?

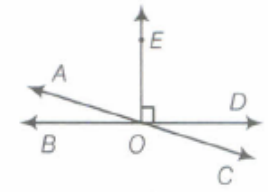
309) Find the values of the angles x,y and z in each of the following:



310) Find the values of the angles x,y and z in each of the following:

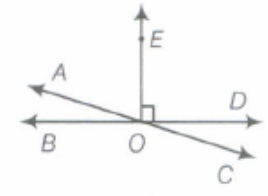


311) In the adjoining figure, name the following pairs of angles.



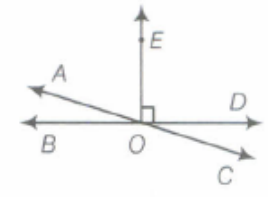
Obtuse vertically opposite angles

312) In the adjoining figure, name the following pairs of angles.



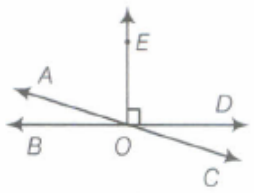
Adjacent complementary angles

313) In the adjoining figure, name the following pairs of angles.



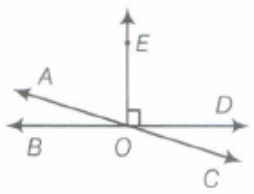
Unequal supplementary angles

314) In the adjoining figure, name the following pairs of angles.



Adjacent angles that do not form a linear pair

315) In the adjoining figure, name the following pairs of angles.

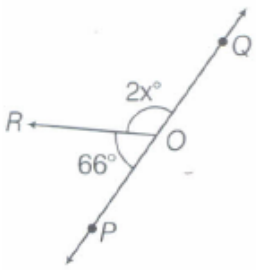


Equal supplementary angles.

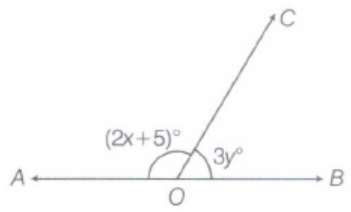
316) Find the complement of each of the following angles. 45°

317) Find the complement of each of the following angles. 60°

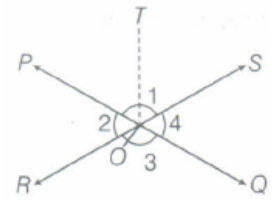
318) In the figure given below, POQ is a line, then find the value of x.



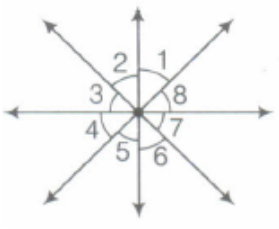
319) In the figure given below, OA and OB are opposite rays, if y = 25°, then find the value of x.



320) In the figure given below, ∠ POT = ∠ SOT = 70°, then find the measures of ∠ 2, ∠ 3 and ∠ 4.



321) In the figure given below, find the sum of measures of all the angles.



322) Find the supplement of each of the following angles.75°

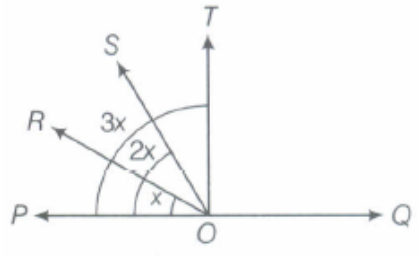
323) Find the supplement of each of the following angles.135°

324) Find the supplement of each of the following angles.95°

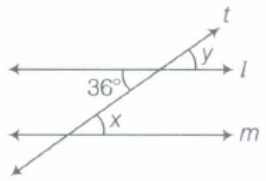
325) Find the angle, which is double of its complement and half of its supplement.

326) Let ∠ A and ∠ B be a pair of supplementary angles such that ∠ A = $\frac{1}{2}$ ∠ B. Find the angles.

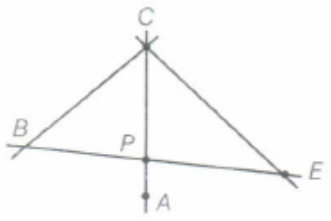
327) In the following figure, find the value of x.



328) In the adjacent figure, line I is parallel to line m and line t is a transversal line. Then, find the values of x and y.



329) In the adjoining figure, AC and BE intersect at P. AC and BC intersect at C, AC and EC intersect at C. Try to find another ten pairs of intersecting line segments. Should any two lines or line segments necessarily intersect? Can you find two pairs of non-intersecting line segments in the figure? Can two lines intersect in more than one point? Think about it.



330) Find examples from your surroundings, where lines intersect at right angles.

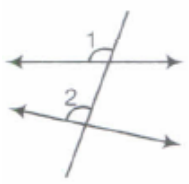
331) If two lines intersect, do they always intersect at right angles?

332) Suppose two lines are given. How many transversals can you draw for these lines?

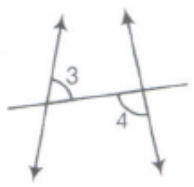
333) If a line is a transversal to three lines, then how many points of intersection are there?

334) Try to identify a few transversals in your surroundings.

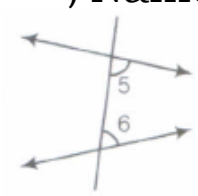
335) Name the pairs of angles in each figure.



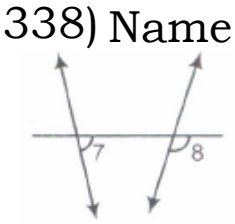
336) Name the pairs of angles in each figure.



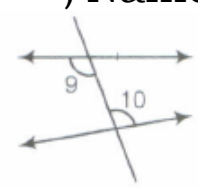
337) Name the pairs of angles in each figure.



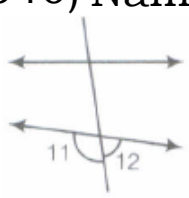
338) Name the pairs of angles in each figure.



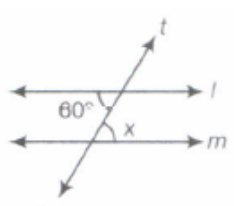
339) Name the pairs of angles in each figure.



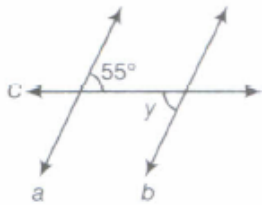
340) Name the pairs of angles in each figure.



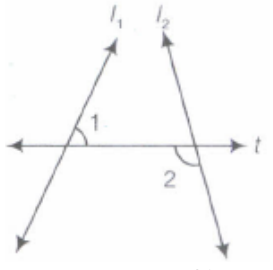
341)



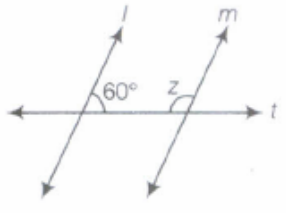
Lines l || m; t is a transversal, ∠ x = ?

342) 

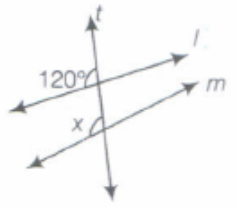
Lines a||b; c is a transversal, ∠y=?

343) 

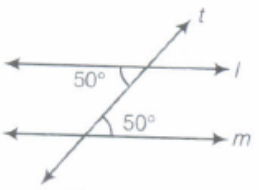
l_1,l_2 are two lines; t is a transversal. Is ∠1=∠2?

344) 

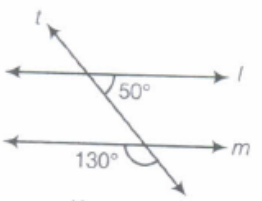
Lines l||m; t is a transversal; ∠z = ?

345) 

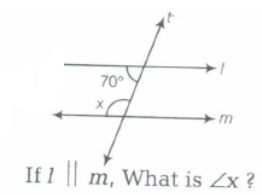
Lines l||m; t is transversal; ∠x = ?

346) 

Is $l \parallel m$? Why ?

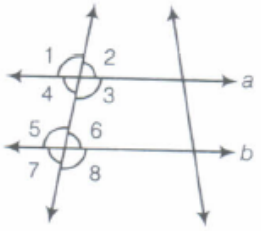
347) 

Is $l \parallel m$? Why ?

348) 

If $l \parallel m$, What is ∠x ?

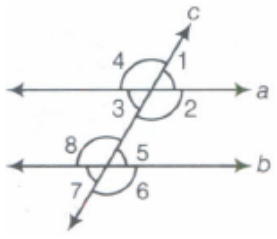
349) State the property that is used in each of the following statements. If a||b, then ∠1 = ∠5



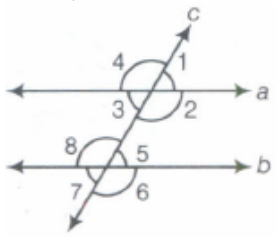
350) State the property that is used in each of the following statements. If ∠4=∠6, then a||b.

351) State the property that is used in each of the following statements. If ∠4 + ∠5 = 180°, then a || b.

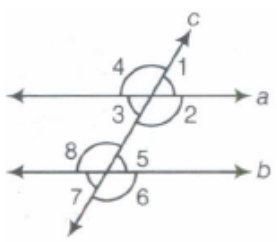
352) In the adjoining figure, identify the pairs of corresponding angles.



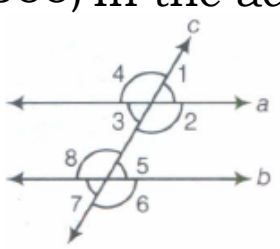
353) In the adjoining figure, identify the pairs of alternate interior angles.



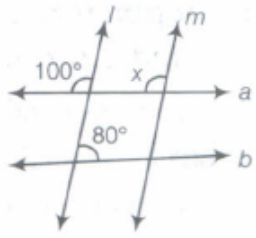
354) In the adjoining figure, identify the pairs of interior angles on the same side of the transversal.



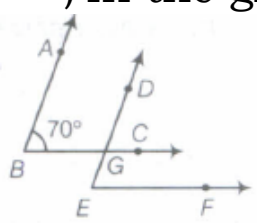
355) In the adjoining figure, identify the vertically opposite angles.



356) Find the value of x in each of the following figures, if 1 | | m.

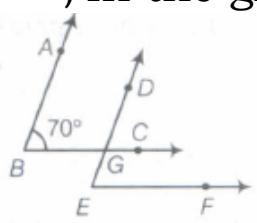


357) In the given figure, the arms of two angles are parallel. If ∠ ABC = 70°, then find



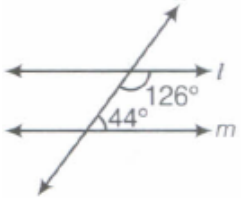
∠ DGC

358) In the given figure, the arms of two angles are parallel. If ∠ ABC = 70°, then find

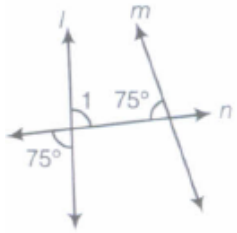


∠ DEF

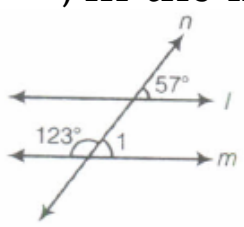
359) In the figures given below, decide whether l is parallel to m



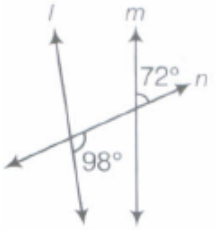
360) In the figures given below, decide whether I is parallel to m



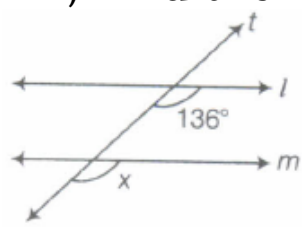
361) In the figures given below, decide whether l is parallel to m



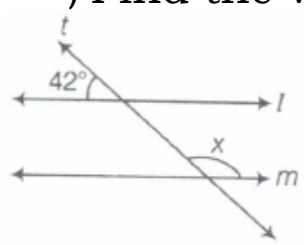
362) In the figures given below, decide whether l is parallel to m



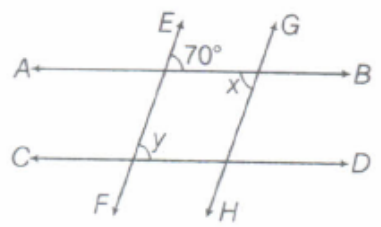
363) Find the value of x in the following figure.



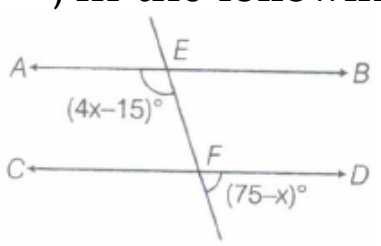
364) Find the value of x in the following figure.



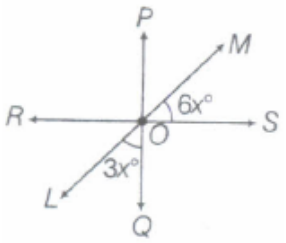
365) In the following figure, AB IICO and FE IIGH. Find the measures of ∠x and ∠y.



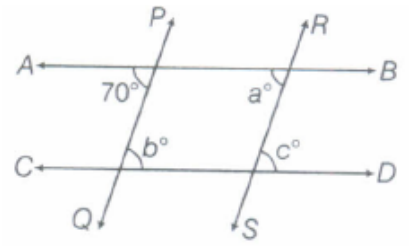
366) In the following figure, find the value of x.



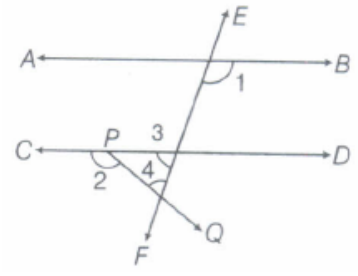
367) Find the value of x. in the figure given below:



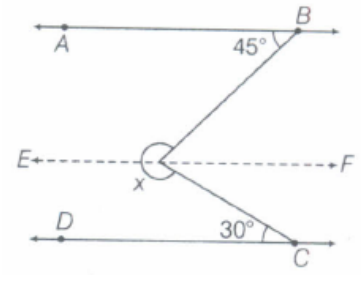
368) Find the values of a, b and c. Stating your reasons clearly, where AB II CD and PQ II RS.



369) In the figure, AB II CD, ∠1= 100°, ∠2 = 120°, find ∠3 and ∠4



370) Determine the value of x in the figure given below, where AB || CD.



371) Identify which of the following pairs of angles are complementary and which are supplementary.
60°, 120°

372) Identify which of the following pairs of angles are complementary and which are supplementary.
65°, 25°

373) Identify which of the following pairs of angles are complementary and which are supplementary.
70°, 20°

374) Find the complement of each of the following angles. 30°

375) Find the complement of each of the following angles.35°

376) Find the complement of each of the following angles. 48°

377) Find the complement of each of the following angles. 69°

378) Find the supplement of each of the following angles.121°

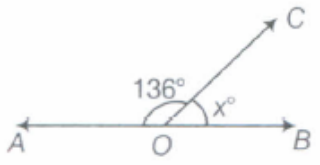
379) Find the supplement of each of the following angles.139°

380) Find the supplement of each of the following angles.35°

381) Find an angle whose supplement is $\frac{2}{3}$ of its complement.

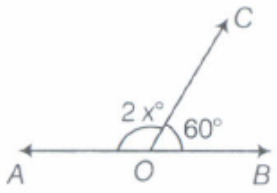
382) Find the angle which is double of its supplement.

383) In the following figure, find the value of x°.

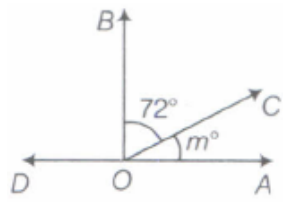


384) Find an angle whose supplement is $\frac{2}{3}$ of it.

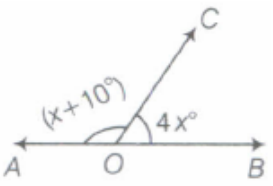
385) In the following figure, find the value of x.



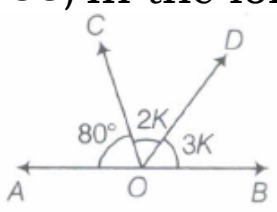
386) In the following figure, find the value of m, where BO ⊥ DA.



387) In the following figure, find the value of x.



388) In the following figure, find the value of K.



389) Find the complement of the angle 20°.

390) Find the supplement of the angle 105°.

391) Two supplementary angles are in the ratio of 3 : 7 ,find the angles.

392) Two complementary angles are in the ratio of 2:7, find the angles.

393) Find the complement of each of the following: 35°

394) Find the complement of each of the following: 46°

395) Find the complement of each of the following: 22°

396) Find the complement of each of the following: 56°

397) Find the supplement of each of the following: 108°

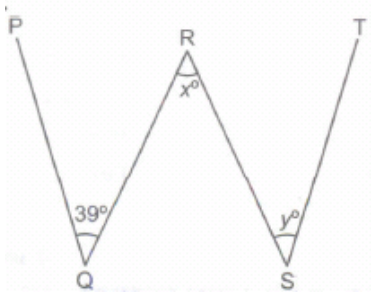
398) Find the supplement of each of the following: 115°

399) Find the supplement of each of the following: 132°

400) Find the supplement of each of the following: $156°$

401) Find an angle, whose complement is $\frac{1}{4}$ of it

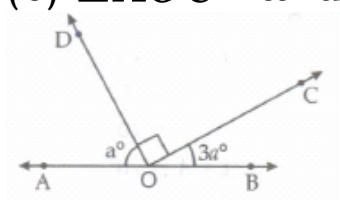
402) Four line segments PQ, QR, RS and ST are making the letter W, PQ II RS and QR II ST. If angle between PQ and QR is 39°. Find the value of x and y.



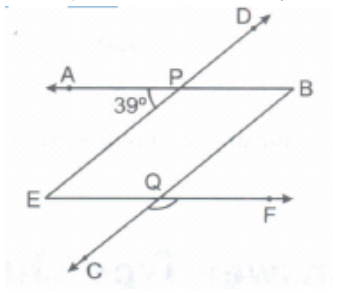
403) The point A, O and B are collinear. Ray OC⊥ ray OD, check whether:

(a) $\angle AOD$ and $\angle BOC$ are complementary.

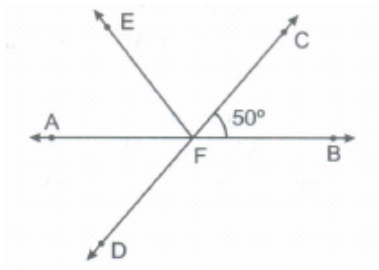
(b) $\angle AOC$ and $\angle BOC$ are supplementary.



404) AB II EF, ED II CB and $\angle APE$ is 39°, find $\angle CQF$.



405) CD intersects the line AB at F, $\angle CFB = 50^0$ and $\angle EFA = \angle AFD$. Find the measure of $\angle EFC$.

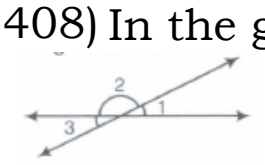


49 x 3 = 147

406) The difference in the measures of two complementary angles is 12°. Find the measures of the angles.

407) Among two supplementary angles, the measure of the larger angle is 44° more than the measure of the smaller. Find their measures.

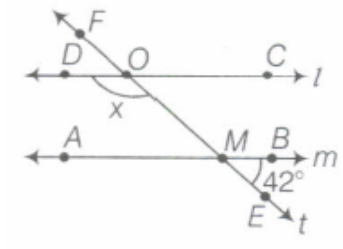
408) In the given figure, if ∠ 1=30°, find ∠ 2 and ∠ 3.



409) Find the angle, which is equal to its complement.

410) Find the angle which is equal to its supplement.

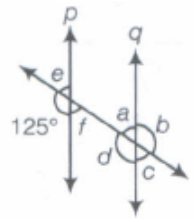
411) In the following figure, find the value of x, if the lines I and m are parallel lines and line t is a transversal to line 1 and m



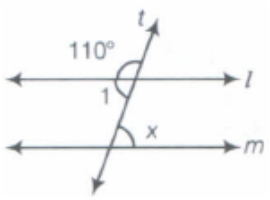
412) Find the measures of the angles made by the intersecting lines at the vertices of an equilateral triangle.

413) Draw any rectangle and find the measures of angles at the four vertices made by the intersecting lines.

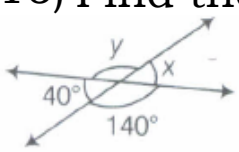
414) In the given figure, p II q. Find the unknown angles.



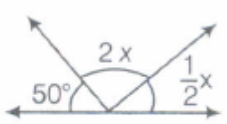
415) Find the value of x in each of the following figures, if 1 | | m.



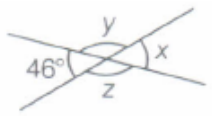
416) Find the value of the angles x and y in the following figure.



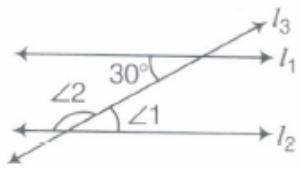
417) In the following figure, find the angles 2x and $\frac{1}{2}x$.



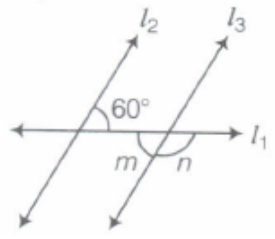
418) Find the value of the angles x, y and z, in the following figure.



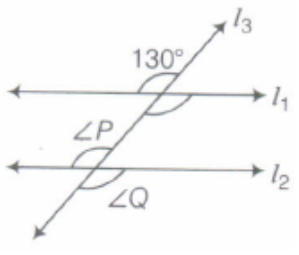
419) In the following figure, find the value of $\angle 1$ and $\angle 2$.



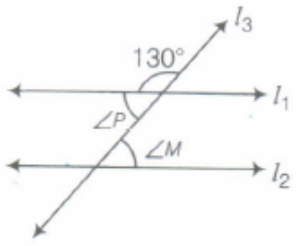
420) In the following figure, find the value of m and n.



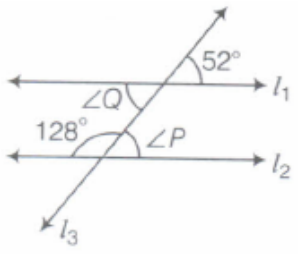
421) In the following figure, find the value of $\angle$ P and $\angle$ Q.



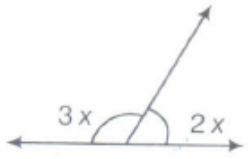
422) In the following figure, find the value of $\angle$ M.



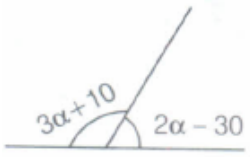
423) In the following figure, find the value of $\angle$ P and $\angle$ Q.



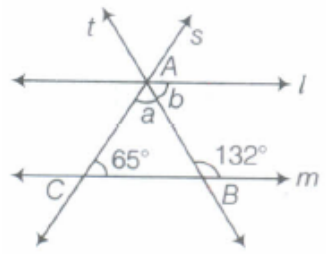
424) In the following figure, find the value of $\angle$ 3x and $\angle$ 2x.



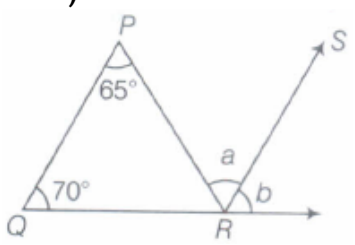
425) From the figure, find the value of 4α .



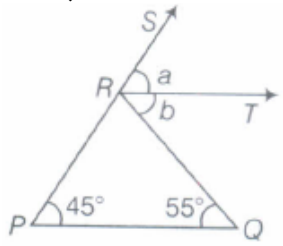
426) In the following figure, if l II m, find the value of a and b.



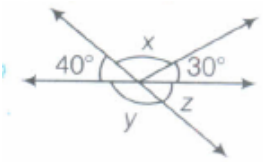
427) In the following figure, OP II RS, then find the value of a and b.



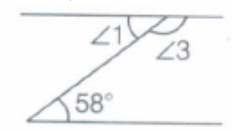
428) In the following figure, PQ II RT. Find the value of a + b.



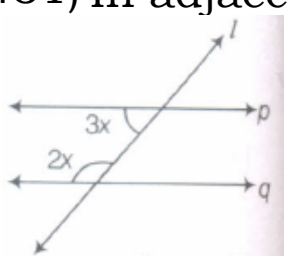
429) In the following figure, find the value of x, y and z.



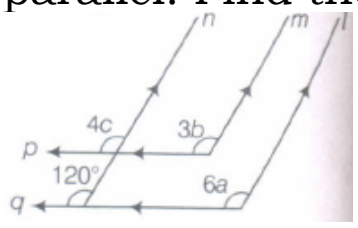
430) In the following figure, $\angle 2=58°$. Find $\angle 1$ and $\angle 3$



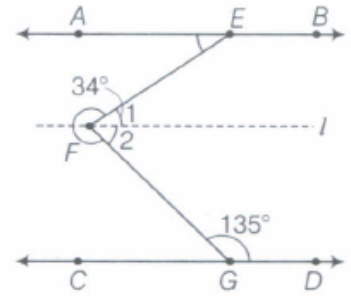
431) In adjacent figure, if p||q and l is a transversal line then find x.



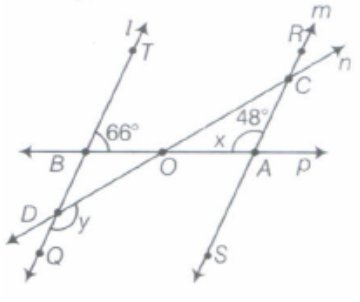
432) In the adjoining figure, I, m and n are parallel lines and the lines p and q are also parallel. Find the values of a, b and c.



433) In the given figure, AB II CD. Find the reflex of $\angle$ EFG.

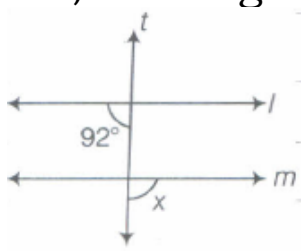


434) In the given figure, two parallel lines l and m are cut by two transversals n and p. Find the value of x and y.

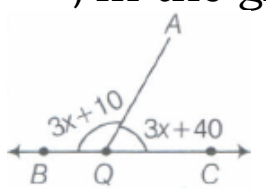


435) Find an angle whose supplement is $\frac{1}{3}$ of it.

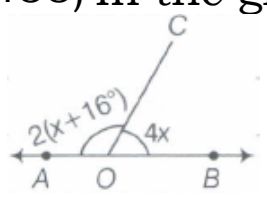
436) In the given figure, find the value of x.



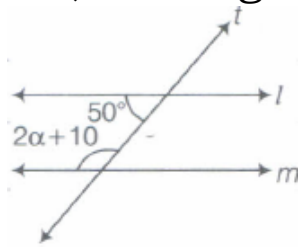
437) In the given figure, find the value of x (approx.)



438) In the given figure, find the value of 3x (approx.)



439) In the given figure, find the value of α .

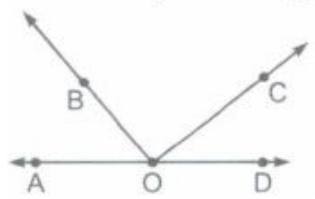


440) In the given figure, are the following adjacent angles?

(a) $\angle$ AOB and $\angle$ EOC

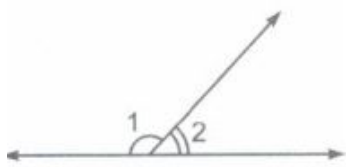
(b) $\angle$ BOD and $\angle$ BOC

Justify your answer.



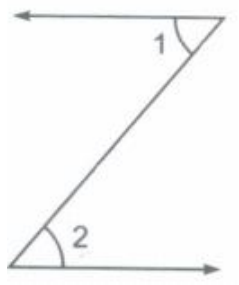
441) Find the angle which is equal to its complement.

442) In the given figure, $\angle$ 1 and $\angle$ 2 are supplementary angles.

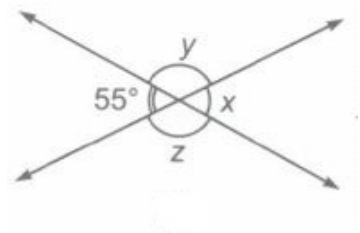


If $\angle$ 1 is decreased, what changes should take place in $\angle$ 2 so that both the angles still remain • supplementary.

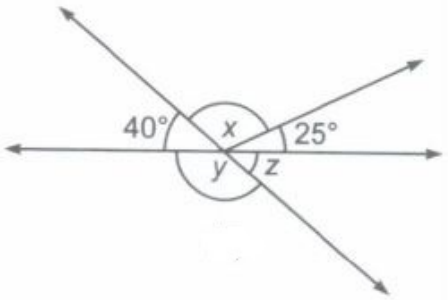
443) In the adjoining figure is $\angle$ 1 adjacent to $\angle$ 2? Give reasons.



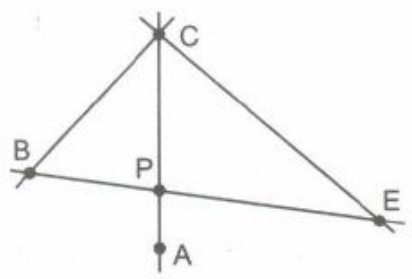
444) Find the value of the angles x, y and z in each of the following:



445) Find the value of the angles x, y and z in each of the following:



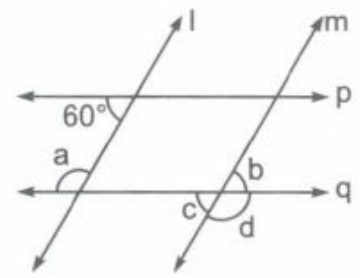
446) In the figure, AC and BE intersect at P AC and BC intersect at C, AC and EC intersect at C. Try to find another ten pairs of intersecting line segments.



447) Can two lines intersect in more than one point? Think about it.

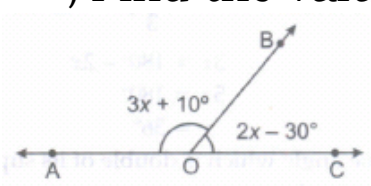
448) Find the measure of the angles made by the intersecting lines at the vertices of an equilateral triangle.

449)

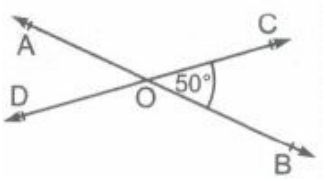


(vi) *Lines l || m; p || q; find a, b, c, d.*

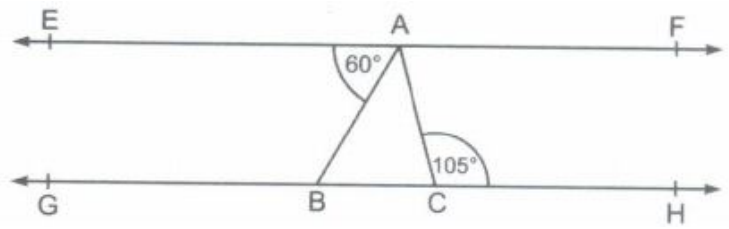
450) Find the value of $\angle AOB$ in the given figure.



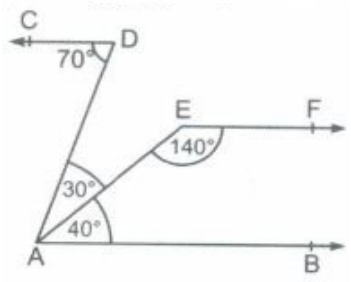
451) In the adjoining figure, the lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ intersect at O.If $\angle$ COB = 50°, find the measures of the other three angles.



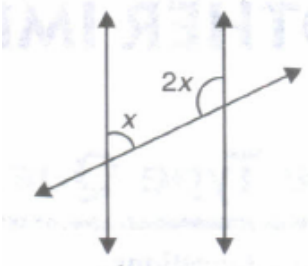
452) In the following figure, EF II GH, $\angle$ EAB =60° and $\angle$ ACH = 105°.
Determine
(i) $\angle$ CAF and
(ii) $\angle$ BAC.



453) In the adjoining figure, show that CD || EF.

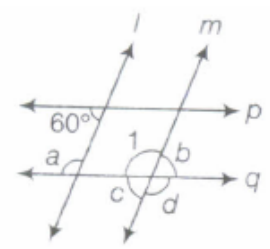


454) Find the value of x in each of the following figures, if 1 | | m.



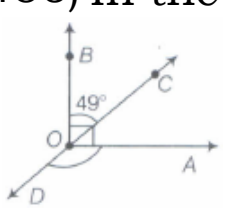
37 x 5 = 185

455)

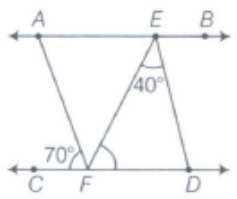


Lines l||m, p||q, Find a, b, c, d?

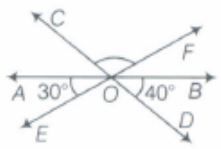
456) In the following figure, OB is perpendicular to OA and ∠BOC =49°. Find ∠AOD.



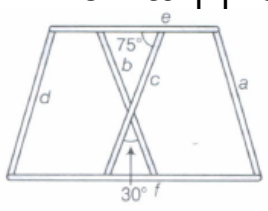
457) In the following figure, AB II CO, AF II ED, ∠AFC = 70° and ∠FED = 40°, then find ∠EFD.



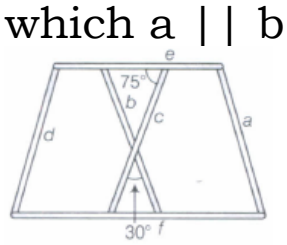
458) Three lines AB, CD and EF intersect each other at point O. If ∠AOE = 30° and ∠DOB = 40°, then find ∠COF.



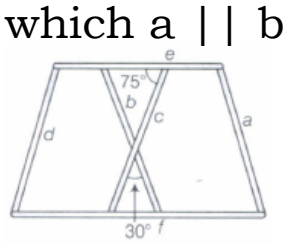
459) Iron rodes a, b, c, d, e and f are making a design of a bridge as shown in figure, in which a || b, c || d, e || f. Find the marked angles between b and c.



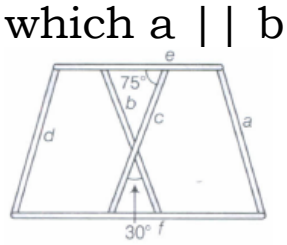
460) Iron rodes a, b, c, d, e and f are making a design of a bridge as shown in figure , in which a || b, c || d, e || f. Find the marked angles between d and e



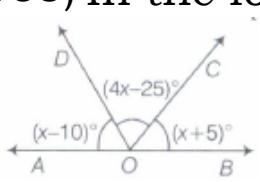
461) Iron rodes a, b, c, d, e and f are making a design of a bridge as shown in figure , in which a || b, c || d, e || f. Find the marked angles between d and f



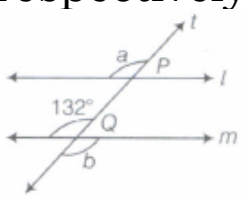
462) Iron rodes a, b, c, d, e and f are making a design of a bridge as shown in figure, in which a || b, c || d, e || f. Find the marked angles between c and f



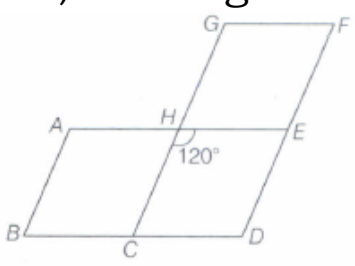
463) In the following figure, find the value of ∠BOC, if the points A, O and B are collinear.



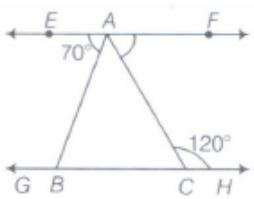
464) In the following figure, l || m and a line t, intersects these lines at P and Q, respectively. Find the value of 2a + b.



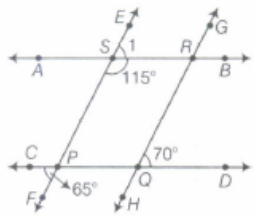
465) In the given figure, AE || GF || BD, AB || CG || DF, then find ∠ABC and ∠CDE.



466) In the following figure, EF || GH, ∠EAB = 70° and ∠ACH=120°. Then, find ∠CAF and ∠BAC.

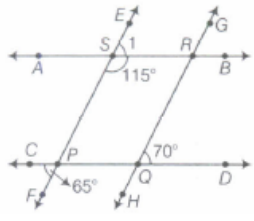


467) In the given figure, examine whether the following pairs of lines are parallel or not.



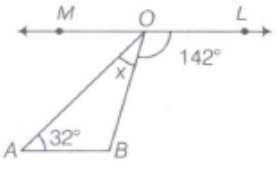
EF and GH

468) In the given figure, examine whether the following pairs of lines are parallel or not.



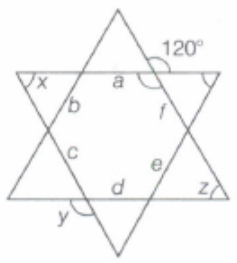
AB and CD

469) Anil is a student of class VII. His teacher explain the concept of line and angles. At the end of the chapter, his teacher conduct a 10 min test. The question was asked in the test is given below

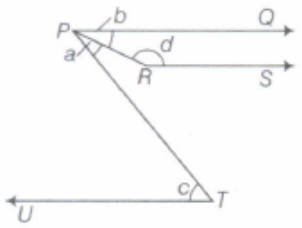


If AB || ML and ∠A = 32°, find the value of x. The answer given by Anil was 46°.
Find the value of x.
What type of value depicted by Anil's answer?

470) Amisha makes a star with the help of line segments a, b, C, d, e and f in which a || d, b II e and c II f. Chhaya marks an angle as 120°, as shown in figure and asks Amisha to find ∠x, ∠y and ∠z. Help Amisha in finding the angles.

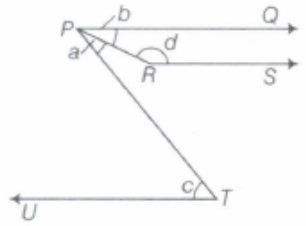


471) In the given figure, PQ, RS and UT are parallel lines.



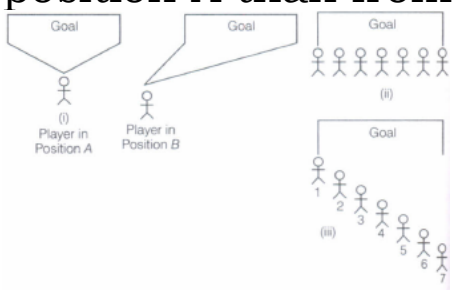
If c=57° and $a = \frac{c}{3}$, then find the value of d.

472) In the given figure, PQ, RS and UT are parallel lines.



If c=75° and a=$\frac{2}{5}$ c, then find the value of b.

473) The drawings below (in figures), show angles formed by the goalpost at different positions of a football player. The greater the angle, the better chance the player has of scoring a goal. For example, the player has a better chance of scoring a goal from position A than from position B.



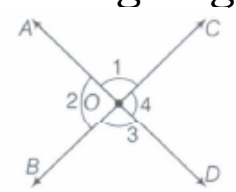
Parts (a) and (b) given above, may help to trace the diagrams and draw and measure angles.

(a) Seven football players are practicing their kicks. They are lined up in a straight line in front of the goalpost. Which player has the best (the greatest) kicking angle?

(b) Now the players are linked up as shown in Figure. Which player has the best kicking angle?

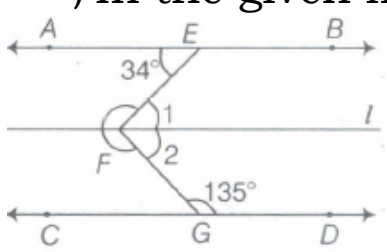
(c) Estimate atleast two situations such that the angles formed by different positions of two players are complement to each other.

474) Two lines AB and CD intersect at 0 [figure]. Write all the pairs of adjacent angles by taking angles 1,2,3 and 4 only.



475) A road crosses a railway line at an angle of 30° as shown in figure. Find the values of a, b and c.

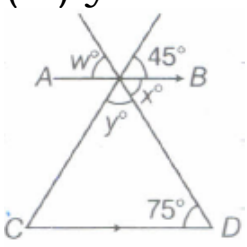
476) In the given figure, AB II CD. Find the reflex ∠EFG.



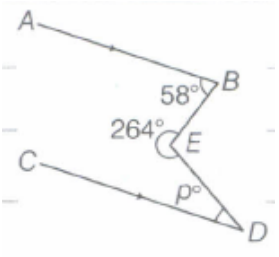
477) In the given figure, AB II CO. Find the value of (i) w

(ii) x

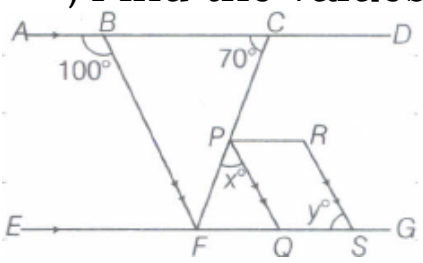
(iii) y



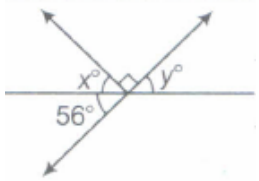
478) In the following figure, determine the unknown.



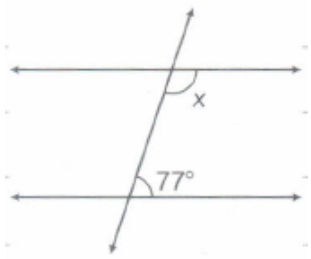
479) Find the values of x and y in the following figure.



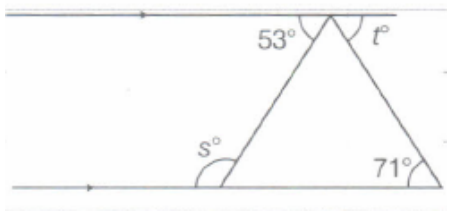
480) Determine the values of x and y and state reason for your answer.



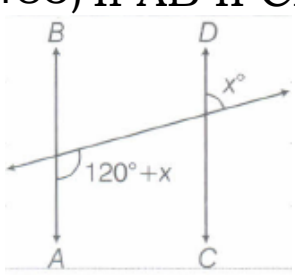
481) Find the value of x in the figure given below:



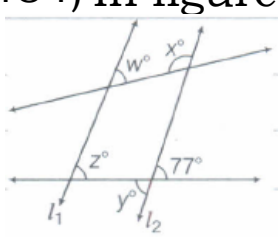
482) In the given figure, find the values of s and t.



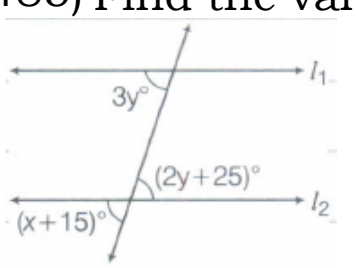
483) If AB II CD, then find the value of x.



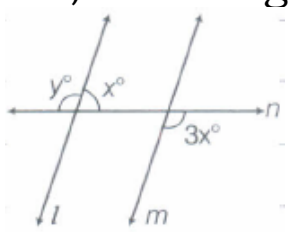
484) In figure, if l_1 || l_2, then express x + y in terms of w and z.



485) Find the value of x, if l_1 || l_2



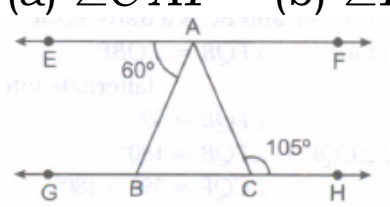
486) In the figure, if l| |m, then find the value of y.



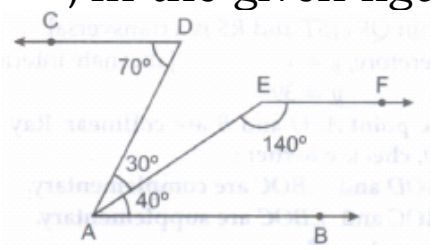
487) List ten figures around you and identify the acute, obtuse and right angles found in them.

488) In the given figure, EF II GH, $\angle EAB = 60^0$ *and* $ACH = 105^0$, then find the values of:

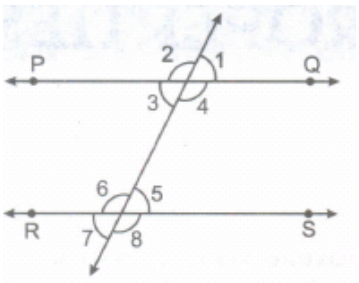
(a) $\angle CAF$ (b) $\angle BAC$



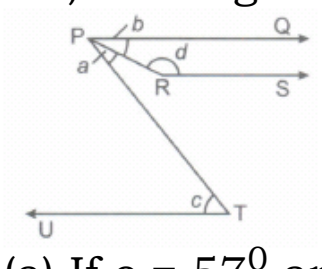
489) In the given figure, show that CD || EF.



490) In the given figure, PQ II RS. If 1 = (2a + b)° and $\angle 6 = (3a - b)^0$ then find the measure of $\angle 2$ in terms of b.



491) In the given figure, PQ, RS, and UT are parallel lines.



(a) If c = 57^0 and $a = \frac{c}{3}$ then find the value of d.

(b) If c = 75° and $a = \frac{2}{3}c$ then find the value of b.

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