

Comparing Quantities

7th Standard
Mathematics

Exam Time : 00:01:00 Hrs

Total Marks : 1
114 x 1 = 114

- 1) Which of the following is the ratio of 3 km to 300 m?
(a) 10: 1 (b) 1 : 10 (c) 100: 1 (d) 1 : 100
- 2) If $5: x = 3: 4$, then what will be the value of 'x'?
(a) $\frac{3}{20}$ (b) $\frac{15}{4}$ (c) $\frac{20}{3}$ (d) $\frac{4}{15}$
- 3) Gayatri's income is Rs 160000 per year. She pays 15% of this as house rent and 10% of the remainder on her child's education. The money left with her is
(a) RS 136000 (b) Rs120000 (c) Rs122400 (d) Rs14000
- 4) The ratio of Fatima's income to her savings is 4 : 1. The percentage of money saved by her is
(a) 20% (b) 25% (c) 40% (d) 80%
- 5) In a scout camp, 40% of the scouts were from Gujarat State and 20% of these were from Ahmedabad. The percentage of scouts in the camp from Ahmedabad is
(a) 25% (b) 32.5% (c) 8% (d) 50%
- 6) A farmer bought a buffalo for Rs 44000 and a cow for Rs 18000. He sold the buffalo at a loss of 5% but made a profit of 10% on the cow. The net result of the transaction is
(a) loss of Rs200 (b) Profit of Rs 400 (c) loss of Rs 400 (d) Profit of Rs 200
- 7) If Mohan's income is 25% more than Raman's Income, then Raman's income is less than Mohan's income by
(a) 25% (b) 80% (c) 20% (d) 75%
- 8) The interest on Rs 30000 for 3 yr at the rate of 15% per annum is
(a) Rs4500 (b) Rs9000 (c) Rs18000 (d) Rs13500
- 9) The sum which will earn a simple interest of Rs 126 in 2 yr at 14% per annum is
(a) Rs 394 (b) Rs395 (c) Rs450 (d) RS 540
- 10) What rate gives Rs 280 as interest on a sum of Rs 56000 in 2 yr?
(a) 2.5% (b) 0.25% (c) 25% (d) 0.025%
- 11) When 35% is expressed in fraction, it is equal to :
(a) $\frac{8}{15}$ (b) $\frac{7}{20}$ (c) $\frac{3}{4}$ (d) $\frac{7}{10}$
- 12) $\frac{5}{20}$ is equal to:
(a) 40% (b) 45% (c) 25% (d) 20%
- 13) If 25% of a number is 40, the number is:
(a) 100 (b) 140 (c) 160 (d) None of these
- 14) The ratio of 3 kg and 1 kg 500 g is :
(a) 1:5 (b) 2:1 (c) 2:3 (d) 3:2
- 15) The simple interest for Rs.2,000 at the rate of 5% p.a. for 3 years is
(a) Rs.400 (b) Rs.150 (c) Rs.250 (d) Rs.300
- 16) Which of the following is the ratio of 3 km to 300 m?
(a) 10:1 (b) 1:10 (c) 100:1 (d) 1:100

- 17) If $5 : x = 3 : 4$, what will be the value of 'x' ?
 (a) $\frac{3}{20}$ (b) $\frac{15}{4}$ (c) $\frac{20}{3}$ (d) $\frac{4}{15}$
- 18) Ram saves Rs.400 from his salary. If this is 10% of his salary, what is his salary?
 (a) 40000 (b) 9000 (c) 4000 (d) 10000
- 19) An article purchased for Rs.1000 is sold for Rs.1100. What is his gain percentage?
 (a) 40% (b) 30% (c) 20% (d) 10%
- 20) You have Rs.2400 in your account & the interest rate is 5% per annum. After how many years would you earn Rs.240 as interest?
 (a) 1 yrs (b) 2 yrs. (c) 4 yrs. (d) 8 yrs.
- 21) The population of a city decreased from 25000 to 24500. Find the percentage decrease in population?
 (a) 4% (b) 3% (c) 2% (d) 1%
- 22) What rate gives Rs.280 as interest on a sum of Rs.56000 in 2 years?
 (a) 2.5% (b) 0.25% (c) 25% (d) 0.025%
- 23) The ratio of the heights 1.50 m and 75 cm of two persons can be written as :
 (a) 1 : 50 (b) 1 : 5 (c) 2 : 1 (d) 1 : 2
- 24) Out of 50 children in a class, 20 are boys. Then the percentage of girls is
 (a) 60 (b) 30 (c) 50 (d) $66\frac{2}{3}$
- 25) The interest on Rs.5000 at the rate of 15% per annum for one month is :
 (a) Rs.750 (b) Rs.75 (c) Rs.625 (d) Rs.62.50
- 26) 20% of 700 m is :
 (a) 560 m (b) 70 m (c) 210 m (d) 140 m
- 27) Gayatri's income is Rs.1,60,000 per year. She pays 15% of this as house rent and 10% of the remainder on her child's education. The money left with her is:
 (a) Rs.136000 (b) Rs.120000 (c) Rs.122400 (d) Rs.14000
- 28) The ratio of Fatima's income to her savings is 4 : 1. The percentage of money saved by her is :
 (a) 20% (b) 25% (c) 40% (d) 80%
- 29) 0.07 is equal to :
 (a) 70% (b) 7% (c) 0.7% (d) 0.07%
- 30) What percent of Rs.4500 is Rs.9000?
 (a) 25 (b) $\frac{1}{2}$ (c) 2 (d) 50
- 31) 5.2 is equal to :
 (a) 52% (b) 5.2% (c) 520% (d) 0.52%
- 32) The ratio 3 : 8 is equal to :
 (a) 3.75% (b) 37.5% (c) 0.375% (d) 267%
- 33) 225% is equal to:
 (a) 9:4 (b) 4:9 (c) 3: 2 (d) 2 : 3
- 34) A bicycle is purchased for Rs.1800 and is sold at a profit of 12%. Its selling price is :
 (a) Rs.1584 (b) Rs.2016 (c) Rs.1788 (d) Rs.1812
- 35) A cricket bat was purchased for Rs. 800 and was sold for Rs.1600. Then profit earned is :
 (a) 100% (b) 64% (c) 50% (d) 60%

- 36) The interest on Rs.30000 for 3 years at the rate of 15% per annum is :
 (a) Rs.4500 (b) Rs.9000 (c) Rs.18000 (d) Rs.13500
- 37) Amount received on Rs.3000 for 2 years at the rate of 11% per annum is :
 (a) Rs.2340 (b) Rs.3660 (c) Rs.4320 (d) Rs.3330
- 38) Interest on Rs.12000 for 1 month at the rate of 10% per annum is :
 (a) Rs.1200 (b) Rs.600 (c) Rs.100 (d) Rs.12100
- 39) Rajni and Mohini deposited Rs.3000 and Rs.4000 in a company at the rate of 10% per annum for 3 years and $2\frac{1}{2}$ years respectively. The difference of the amounts received by them will be:
 (a) Rs.100 (b) Rs.1000 (c) Rs.900 (d) Rs.1100
- 40) If 90% of x is 315 cm, then the value of x is :
 (a) 325 cm (b) 350 cm (c) 405 cm (d) 340 cm
- 41) On selling an article for Rs. 329, a dealer lost 6%. The cost price of the article is :
 (a) Rs.310.37 (b) Rs.348.74 (c) Rs.335 (d) Rs.350
- 42) $\frac{25\% \text{ of } 50\% \text{ of } 100\%}{25 \times 50}$ is equal to:
 (a) 1.1% (b) 0.1% (c) 0.01% (d) 1%
- 43) The sum which will earn a simple interest of Rs.126 in 2 years at 14% per annum is :
 (a) Rs.394 (b) Rs.395 (c) Rs.450 (d) Rs.540
- 44) If $2x = 3y = 4z$ then $x : y : z$ is
 (a) [(2 : 3 : 4) (b) (6 : 4 : 3)
- 45) If $A : B = 2 : 3$ and $B : C = 4 : 5$, then $A : C =$ _____
 (a) 8 : 15 (b) 6 : 5
- 46) If $A : B = 1 : 5$ and $B : C = 3 : 4$, then $A : C =$ _____
 (a) 3 : 20 (b) 20 : 3
- 47) If $3A = 4B = 5C$, then $A : B : C =$ _____
 (a) 20 : 15 : 12 (b) 3 : 4 : 5
- 48) An article was bought for Rs.75 and sold for Rs.100. Gain per cent is _____
 (a) 25% (b) $33\frac{1}{3}\%$
- 49) A ball was bought for Rs.120 and sold for Rs.100. Loss % is
 (a) 20% (b) $16\frac{2}{3}\%$
- 50) An article was bought for Rs.50 and sold by getting a profit of 10%. Then S.P is _____
 (a) Rs.55 (b) Rs52.5
- 51) For CP = Rs. 100, Loss = 15%, then SP = _____
 (a) Rs.85 (b) Rs.115
- 52) If the 50% of a number is 50, then the number is _____
 (a) 50 (b) 100
- 53) 100% of 100 is _____
 (a) 1 (b) 100
- 54) If 10% of a number is 10, then the number is _____
 (a) 100 (b) 10
- 55) 1% of 100 is _____
 (a) 100 (b) 1

56) The ratio of a unit is:

- (a) rupees (b) metres (c) no unit (d) grams

57) The ratio of Rs.6 and Rs.7.50 in the simplest form is

- (a) 4 : 5 (b) 5 : 4 (c) 1 : 1.5 (d) 1.5 : 1

58) The ratio 3 kg and 1 kg 500 g in the simplest form is

- (a) 1 : 5 (b) 5 : 1 (c) 2 : 1 (d) 1 : 2

59) The simplest ratio of 15 weeks and 10 days is:

- (a) 1 : 21 (b) 21 : 1 (c) 2 : 21 (d) 21 : 2

60) If quantities a, b, c and d are in a proportion, then which of the following is true

- (a) $a \times c = \frac{c}{d}$ (b) $b \times d = \frac{d}{c}$ (c) $a \times d = b \times c$ (d) $b \times c = b \times d$

61) In a class there are 15 girls and 25 boys. Percentage of boys in the class is

- (a) 37.5% (b) 62.5% (c) $\frac{800}{3}\%$ (d) 160%

62) 15 is 3% of

- (a) 5 (b) 50 (c) 500 (d) 5000

63) Two quantities 'a' and 'b' are said to vary directly, if:

- (a) The ratio $\frac{a}{b}$ does not remain constant (b) The ratio $\frac{a}{b}$ remains constant
(c) $(a + b)$ remains constant (d) $(a \times b)$ remains constant

64) Two quantities 'a' and 'b' are said to vary inversely, if

- (a) a/b remains constant (b) a/b does not remain constant
(c) $(a + b)$ remains constant (d) $a.b$ remains constant

65) If $2A = 3B$ and $5B = 6C$, then $A : C$ is

- (a) 5 : 6 (b) 6 : 5 (c) 9 : 5 (d) 5 : 9

66) If $A : B = a : b$ and $B : C = b : c$, then $A : B : C$ is

- (a) $a : 2b : c$ (b) $a : b : c$ (c) $a : \frac{b}{2} : c$ (d) $a : c$

67) If $a : b = 1 : 2$ and $b : c = 3 : 4$, then $a : c$ is

- (a) 3 : 8 (b) 8 : 3 (c) 2 : 3 (d) 3 : 2

68) If 10 is 10% of a number, then the number is

- (a) 10 (b) 100 (c) 1 (d) 1000

69) Interest on Rs.100 at 10% p.a. for one year is

- (a) Rs.1 (b) Rs.100 (c) Rs.10 (d) Rs.90

70) Which of the following is $\frac{2}{5}$ of its supplement angle?

- (a) 36° (b) 144° (c) 72° (d) 80°

71) Angles of a triangle are 2 : 3 : 4. The measure of the smallest angle is:

- (a) 40° (b) 20° (c) 60° (d) 80°

72) 30% of which of the following is 9?

- (a) 270 (b) 900 (c) 30 (d) 60

73) An article after 10% discount is available for Rs.108. Its marked price is:

- (a) Rs.1080 (b) Rs.108.80 (c) Rs.120 (d) Rs.118

74) One of the two equal angles of a triangle is 50° . The measure of the third angle is:

- (a) 50° (b) 100° (c) 90° (d) 80°

75) The ratio of Rs 10 to 50 paise is

- (a) 20 : 1 (b) 10 : 1 (c) 5 : 1 (d) 1 : 20.

- 76) The ratio of 6 kg to 400 g is
 (a) 10:1 (b) 15:1 (c) 12:1 (d) 6:1
- 77) The ratio of 3 m to 60 cm is
 (a) 4 : 1 (b) 3 : 1 (c) 5 : 1 (d) 2 : 1.
- 78) The ratio of 15 days to 72 hours is
 (a) 2:1 (b) 3:1 (c) 4:1 (d) 5:1
- 79) The ages of father and son are 45 years and 10 years. The ratio of their ages is
 (a) 3:2 (b) 5:2 (c) 9:2 (d) 15:2
- 80) The cost of 3 envelopes is Rs 15. Find the cost of 5 envelopes.
 (a) Rs 20 (b) Rs 25 (c) Rs 30 (d) Rs 40
- 81) The cost of 7 kg of potatoes is Rs 42. How many kg of potatoes can be purchased for Rs 96?
 (a) 10 kg (b) 12 kg (c) 15 kg (d) 16 kg.
- 82) The cost of 4 m of cloth is Rs 40. Find the cost of 9 m of cloth.
 (a) Rs 90 (b) Rs 60 (c) Rs 50 (d) Rs 40
- 83) The cost of 8 pencils is Rs 10. Find the cost of 20 pencils
 (a) Rs 20 (b) Rs 25 (c) Rs 24 (d) Rs 30
- 84) A motorcycle goes 120 km in 3l of petrol. How much petrol will be required to go 600 km?
 (a) 10 l (b) 12 l (c) 15 l (d) 20 l
- 85) $\frac{1}{4}$ as per cent is
 (a) 20% (b) 25% (c) 30% (d) $12\frac{1}{2}\%$
- 86) $\frac{1}{8}$ as per cent is
 (a) 25% (b) $12\frac{1}{2}\%$ (c) 20% (d) 16%
- 87) $\frac{5}{2}$ as per cent is
 (a) 125% (b) 150% (c) 200% (d) 250%
- 88) 0.1 as per cent is
 (a) 1% (b) 10% (c) 100% (d) 0.1%
- 89) 0.04 as per cent is
 (a) 10% (b) 20% (c) 25% (d) 4%
- 90) $\frac{2}{2}$ as per cent is
 (a) 1% (b) 10% (c) 100% (d) none of these.
- 91) Out of 40 children in a class, 10 are boys. What is the percentage of boys?
 (a) 10% (b) 40% (c) 4% (d) 25%
- 92) Out of 25 students, 5 are absent. What per cent of the students are absent?
 (a) 10% (b) 20% (c) 25% (d) 30%
- 93) A shop has 50 televisions, out of which 5 are defective. What per cent are defective?
 (a) 5% (b) 10% (c) 50% (d) 25%
- 94) There are 100 voters. 50 of them votes yes. What per cent voted yes?
 (a) 10% (b) 25% (c) 50% (d) 5%
- 95) If 40% of students in a class are Hindus, what per cent of the students are non-Hindus?
 (a) 40% (b) 10% (c) 50% (d) 60%

- 96) A basket is full of bananas, mangoes and apples. If 50% are mangoes, 30% are apples, then what per cent are bananas?
 (a) 10% (b) 20% (c) 25% (d) 40%.
- 97) What is 5% of 200?
 (a) 2 (b) 5 (c) 10 (d) 100
- 98) What is $12\frac{1}{2}\%$ of 200?
 (a) 25 (b) 12 (c) 40 (d) 100
- 99) There are 40 children in a class. 25% like playing football. How many children like playing football?
 (a) 10 (b) 20 (c) 30 (d) 40
- 100) The salary of Manish is Rs 4000. He saves 10% of his salary. How much does he save?
 (a) Rs 400 (b) Rs 2000 (c) Rs 3000 (d) Rs 4000
- 101) Convert $\frac{1}{5}$ to per cent
 (a) 10% (b) 20% (c) 40% (d) 80%.
- 102) A traveller covered 8% of his total journey which is 50 km long on foot. How many kilometre did he cover on foot?
 (a) 1 km (b) 2 km (c) 3 km (d) 4 km.
- 103) In a particular kind of pulses, the quantity of protein is 25%. How much protein is there in 4 kg of that pulse?
 (a) 1 kg (b) 2 kg (c) 3 kg (d) 4 kg
- 104) Meenu Purchased a coat for Rs 600. She had to pay 4% sales tax on it. Find the amount of sales tax.
 (a) Rs 24 (b) Rs 16 (c) Rs 20 (d) Rs 32
- 105) The price of petrol has risen from Rs 48 to Rs 52 a litre. By what per cent has the price risen up?
 (a) $\frac{25}{3}\%$ or 8.33% (b) 25% (c) 4% (d) 40%
- 106) Rs 100 are to be divided between Apala and Meenu. Apala gets 60%. What does Meenu get?
 (a) Rs 10 (b) Rs 20 (c) Rs 30 (d) Rs 40
- 107) The angles of a triangle are in the ratio 1 : 1 : 2. What is the largest angle?
 (a) 90° (b) 45° (c) 30° (d) 60°
- 108) The marks in a test decreased from 40 to 30. The percentage decrease is
 (a) 10% (b) 20% (c) 25% (d) 40%.
- 109) The number of students in 2008 was 1000. It became 1100 in 2009. The percentage increase is
 (a) 10% (b) 5% (c) 100% (d) 1000%.
- 110) An article was purchased for Rs 100 and sold for Rs 120. What is the profit?
 (a) Rs 20 (b) Rs 100 (c) Rs 120 (d) None of these.
- 111) A watch was purchased for Rs 316 and sold for Rs 300. What is the loss?
 (a) Rs 16 (b) Rs 8 (c) Rs 24 (d) Rs 32
- 112) A shopkeeper bought a table for Rs 500 and sold it for Rs 400. Find the loss percentage.
 (a) 10% (b) 20% (c) 40% (d) 50%

113) Meenu purchased an item for Rs 800 and sold the same for Rs 1000. The gain percentage is

(a) 25% (b) 20% (c) 40% (d) 50%

114) The interest on a sum of Rs 2500 for 4 years at the interest rate 4% is

(a) Rs 100 (b) Rs 200 (c) Rs 300 (d) Rs 400

$$69 \times 1 = 69$$

115) $18\frac{3}{4}\%$ = _____

116) 30% of 300 = _____

117) A _____ with its denominator 100 is called a per cent.

118) 15 kg is _____% of 50 kg.

119) Weight of Nikhil increased from 60 kg to 66 kg. Then, the increase in weight is _____%.

120) In a class of 50 students, 8% were absent on one day. The number of students present on that day was _____

121) A fruit seller purchased 20 kg of apples at Rs 50 per kg. Out of these, 5% of the apples were found to be rotten. If he sells the remaining apples at Rs 60 per kg, then his _____ is _____%.

122) Amount obtained by depositing Rs 20000 at 8% per annum for six months is _____

123) Rohit buys a chair for Rs 700 and sell it for Rs 750. He earn a profit of _____% in the transaction

124) Rohini bought a bed sheet for Rs 400 and sold it for Rs 440 _____ Her % is _____

125) $18\frac{3}{4}\%$ = _____

126) 30% of Rs.360 = _____

127) 120% of 50 km = _____

128) 2.5 = _____ %

129) $\frac{8}{5}$ = _____ %

130) Weight of Nikhil increased from 60 kg to 66 kg. Then, the increase in weight is _____%.

131) Savitri obtained 440 marks out of 500 in an examination. She secured _____% marks in the examination.

132) Out of a total deposit of Rs 1500 in her bank account, Abida withdraw 40% of the deposit. Now the balance in her account is _____

133) _____ is 50% more than 60.

134) John sells a bat for Rs.75 and suffers a loss of Rs.8. The cost price of the bat is _____

135) If the price of sugar is decreased by 20%, then the new price of 3 kg sugar originally costing Rs.120 will be _____

136) Mohini bought a cow for Rs 9000 and sold it at a loss of Rs.900. The selling price of the cow is _____

137) Devangi buys a chair for Rs.700 and sells it for Rs.750. She earns a profit of _____ % in the transaction.

138) Sonal bought a bed sheet for Rs.400 and sold it for Rs.440. Her _____ % is _____

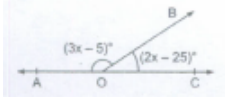
139) Nasim bought a pen for Rs.60 and sold it for Rs.54. His _____ % is _____

140) Aahuti purchased a house for Rs. 50,59,700 and spent Rs.40,300 on its repair To make a profit of 5%, she should sell the house for Rs. _____

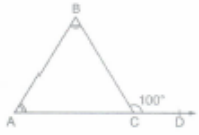
141) If 20 lemons are bought for Rs.10 and sold at 5 for three rupees, then _____ in the transaction is _____%.

- 142) Narain bought 120 oranges at Rs.4 each. He sold 60% of the oranges at Rs. 5 each and the remaining at Rs. 3.50 each. His _____ is _____ %
- 143) Interest on Rs.3000 at 10% per annum for a period of 3 years is _____
- 144) Interest on Rs.12500 at 18% per annum for a period of 2 years and 4 months is _____
- 145) 25 ml is _____ percent of 5 liters.
- 146) If A is increased by 20%, it equals B. If B is decreased by 50%, it equals C. Then _____ % of A is equal to C
- 147) Interest = $\frac{P \times R \times T}{100}$, Where T is _____ R% is _____ and P is _____
- 148) The difference of interest for 2 years and 3 years on a sum of Rs.2100 at 8% per annum is _____
- 149) To convert a fraction into a per cent, we _____ it by 100.
- 150) To convert a decimal into a per cent, we shift the decimal point two places to the _____
- 151) The _____ of interest on a sum of Rs.2000 at the rate of 6% per annum for $1\frac{1}{2}$ years and 2 years is Rs.420.
- 152) When converted into percentage, the value of 6.5 is _____ than 100%.
- 153) To convert a decimal into a per cent, we shift the decimal point two places to the _____
- 154) When converted into percentage, the value of 6.5 is _____ than 100%.
- 155) If $2 : 3 :: x : 18$, then $x =$ _____
- 156) If $6 : x :: 42 : 49$, then $x =$ _____
- 157) If $5 : 12 :: 40 : x$, then $x =$ _____
- 158) If $50 : 11 :: x : 66$, then $x =$ _____
- 159) If 6 men can do a piece of work in 10 days, then 1 man will finish it in _____ days.
- 160) If 10 men completes a wall in 5 days, then _____ men can complete it in a day
- 161) A provision is sufficient for 5 persons for 10 days. For 10 persons the same provision can be sufficient for _____ days.
- 162) If 4 men can reap a field in 4 days, then 1 man will reap it in _____ days
- 163) $\frac{2}{5}$ expressed as per cent, is _____
- 164) $6\frac{1}{4}\%$ expressed as a fraction, is _____
- 165) $7\frac{1}{25}$ expressed as a per cent, is _____
- 166) 75% expressed as a fraction, is _____
- 167) When 37.5% converted into a fraction, we get _____
- 168) When 12.5% expressed as a ratio, we get _____
- 169) $5 : 6$, when converted as a percentage, we get _____
- 170) 0.04, when converted as a percentage, we get _____
- 171) Loss % = $\left[\frac{\text{Loss} \times 100}{CP} \right]$
- 172) Gain% = $\left[\frac{\text{Gain} \times 100}{CP} \right]$
- 173) $CP = \left[\frac{100 \times SP}{(100 + \text{gain}\%)} \right]$
- 174) $SP = \left[\frac{(100 + \text{gain}\%)}{100} \times CP \right]$
- 175) The simple interest for Rs.1000 for 2 years at 5% p.a. is Rs. _____
- 176) The simple interest for Rs.2000 for 3 years at 10% p.a. is Rs. _____
- 177) If the principal of Rs.5000 amount to be Rs.6125, then the interest is Rs. _____
- 178) If the principal is Rs. _____ and simple interest is Rs.1260, then the amount is Rs.7260.

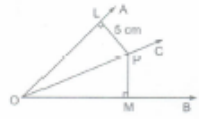
179) If AOC is a straight line, then $x =$ _____



180) In the following figure, if $\angle A = \angle B$, then measure of $\angle A =$ _____



181) In the following figure, OC is the bisector of $\angle AOB$ and $PL \perp OA$ and $PM \perp OB$. If $PL = 5$ cm, then $PM =$ _____



182) Two-third of a number when increased by 10 gives 50. The number is _____

183) At _____ % per annum simple interest Rs.100 will become Rs.300 in 16 years.

$$13 \times 1 = 13$$

184) When an improper fraction is converted into percentage, then the answer can also be less than 100.

(a) True (b) False

185) The interest on Rs 350 at 5% per annum for 73 days is Rs 35.

(a) True (b) False

186) The simple interest on a sum of Rs P for T years at R% per annum is given by the formula:

$$\text{simple interest} = \frac{T \times P \times R}{100}$$

(a) False (b) True

$$187) \frac{4}{3} = 44\frac{2}{3}\%$$

(a) True (b) False

$$188) \frac{2}{3} = 66\frac{2}{3}\%$$

(a) False (b) True

$$189) 65\% \text{ is equal to } \frac{5}{3}$$

(a) True (b) False

190) When an improper fraction is converted into percentage, then the answer can also be less than 100.

(a) True (b) False

191) 8 h is 50% of 4 days.

(a) True (b) False

192) The interest on Rs 350 at 5% per annum for 73 days is Rs 35.

(a) True (b) False

193) The simple interest on a sum of Rs P for T years at R% per annum is given by the formula:

$$\text{simple interest} = \frac{T \times P \times R}{100}$$

(a) False (b) True

194) Out of 600 students of a school, 126 go for a picnic. The percentage of students that did not go for the picnic is 75%.

(a) True (b) False

195) By selling a book for Rs 50, a shopkeeper suffers a loss of 10%. When the cost price of book is Rs 60.

(a) True (b) False

196) If a chair is bought for Rs 2000 and is sold at a gain of 10%, then selling price of the chair is Rs 2010.

(a) True (b) False

17 x 1 = 17

- | | |
|--|---|
| 197) Simple Interest | (1) Rs.1 |
| 198) Profit % | (2) 72^0 |
| 199) Loss % | (3) $\frac{15}{25}$ |
| 200) Income | (4) $\frac{\text{Loss}}{\text{cost price}} \times 100$ |
| 201) 3:5 | (5) $\frac{P \times R \times T}{100}$ |
| 202) 0.25 | (6) $\left(\frac{\text{Gain}}{\text{CP}} \times 100 \right) \%$ |
| 203) $\frac{2}{3}$ | (7) $\left[\frac{100 + \text{gain}\%}{100} \times \text{CP} \right]$ |
| 204) $6\frac{1}{4}\%$ | (8) Rs.75 |
| 205) x^0 is twice of its complement. The measure of x^0 is: | (9) 25% |
| 206) An exterior angle of a triangle is $\frac{3}{2}$ of its interior adjacent angle. Measure of interior adjacent angle is: | (10) $\frac{\text{Profit}}{\text{cost price}} \times 100$ |
| 207) 15% of Rs.500 is | (11) 60^0 |
| 208) If SP = Rs.990, gain = 10%, then CP is: | (12) Expenditure + Saving |
| 209) If SI = Rs.450, Rate = 5% p.a, time = 3 years, then the principal is: | (13) $66\frac{2}{3}\%$ |
| 210) 10% of Rs.10 | (14) Rs.900 |
| 211) If the numbers "a, b, c and d" are in a proportion, then we have | (15) $a : b = c : d$ |
| 212) Gain per cent is: | (16) 1:16 |
| 213) Selling price is | (17) Rs.3000 |

49 x 1 = 49

214) Find the mean proportion between 9 and 16.

215) If 2:3 :: x:18, find x.

216) If 50 : 11 :: x : 66, find x

217) If 6 man can complete the work in 10 days then in how many days 1 man can finish the same work

218) If $\frac{2}{3}A = \frac{3}{4}B = \frac{4}{5}C$ then what is A : B : C?

219) Which is greater 3 : 4 or 4 : 5?

220) If 2A = 3B and 5B = 6C, then what is A : C?

221) What do we call an equality of two ratios?

222) Name the variation in which 'a' and 'b' vary such that "a-b" remains constant.

223) What is 100% of 100?

224) What is the interest on Rs.100 for 1year called?

225) What is 90% of 9.9?

226) What per cent of 1 hour is 36 seconds?

227) An item costing Rs.10 is sold at 10% discount. What is its SP?

228) What amount will Rs.100 become after 1 year at simple interest of 10% p.a.?

229) Find the ratio of 10 hours to a day

230) Find the ratio of 4 minutes to 180 seconds

231) Find the ratio of Rs.5 to 75 paise

232) Find the ratio of 9 m to 450 cm

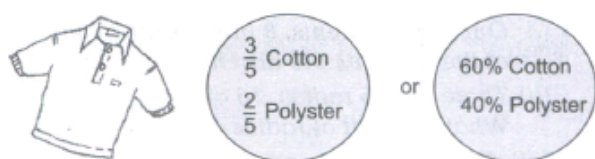
233) A van car cover a distance of 558 km in 36 litres of petrol. How far can it travel on 15 litres of petrol?

- 234) If the weight of 16 pen is 432 g, then how many pens of the same brand would weigh 162 g?
- 235) If 2.5 cm = 500 km is the scale of a map, then what is the actual distance between two places in kms shown at 7.5 cm apart on the map?
- 236) Write as per cent. $5 / 20$
- 237) Write as per cent. $3 / 25$
- 238) write per cent $7 / 10$
- 239) In a class there are 20 girls and 30 boys. What is the percentage of boys in the class?
- 240) Express the following as percentage 5.4
- 241) Express the following as percentage 0.045
- 242) Express the following as percentage 10.10
- 243) Convert the following fractions into per cent $12 / 25$
- 244) Convert the following fractions into per cent $47 / 50$
- 245) Convert the following fractions into per cent $3 / 75$
- 246) On a particular day 10 students out of 50 were absent. What per cent of the students were present
- 247) Express 35% as a fraction
- 248) Express 45% as a ratio.
- 249) Express 312% as a decimal
- 250) What is 30% of 150?
- 251) If 75% of a number is 30, then find the number
- 252) Divide Rs.15000 in ratio of 2 : 3 : 5
- 253) An amount of Rs.10,000 is to be divided among Reeta, Neeta and Sweeta such that Reeta gets 2 parts, Neeta gets 3 parts and Sweeta gets 5 parts. What percentage of money will each get?
- 254) If the angles of triangle are in the ratio 3 : 4 : 5, then find the value of each angle.
- 255) The strength of a school increased from 550 to 605. What is the increase per cent in the strength?
- 256) Price of an item decreased from Rs.120 to Rs.90. Find the percentage of decrease in the price.
- 257) If the buying price of a shirt is Rs.2400 and selling price is Rs.2640, what is the per cent profit?
- 258) The cost of an item is Rs.1200. If the shopkeeper sells it at a loss of 10%. Find the price at which it is sold.
- 259) An item is sold for Rs.754 with a profit of 4%. What is cost price?
- 260) If principal is Rs.3600, rate of interest is 12% p.a., then find the simple interest for 3 years.
- 261) In how many years Rs.1200 becomes Rs.1632 at 12% p.a. simple interest?
- 262) In the following figure, $\Delta ABC = \Delta PQR$. If $BC = 5$ cm, then find the length of Qr
 $88 \times 2 = 176$
- 263) Find the ratio of 4 km to 300 m.
- 264) Are the ratios 1 : 5 and 2 : 15 equivalent?
- 265) Find the mean proportion between 4 and 64.
- 266) A worker is paid Rs 1815 for 15 days. Find the amount, he receives if he works for 8 days?
- 267) An ant can carry 50 times its weight. If a person can do the same, how much would you be able to carry?
- 268) Find the ratio of 4 m to 400 cm.
- 269) Calculate the value of x, if $4 : x :: 1 : 4$.

- 270) Determine the value of x, if $x : 4 :: 2 : 3$.
- 271) If the cost of 6 toys is 240, then find the cost of 21 toys.
- 272) A bus can cover a distance 123 km in 24 L of petrol. Then, how far can it travel in 10 L?
- 273) A wire is cut into three pieces in the ratio 2 : 5: 9. If the longest piece is cut further into three equal pieces and each such piece is 15 cm long, then what is the original length of the wire?
- 274) The sides of a triangle are in a ratio of 2 : 4 : 5. If the shortest side is 6 ern, then find the perimeter of the triangle.
- 275) 60 cows can graze a field in 12 days, then how many cows will graze the same field in 5 days?
- 276) If 45 m of a uniform rod weighs 171 kg, then what will be the weights of 12 m of the same rod?
- 277) If 16 dozens bananas cost Rs360, then how many bananas can be bought in Rs 60?
- 278) The ratio between the present ages of A and 8 is 4: 5. If the ratio between their ages after 4 yr becomes 14: 17, then what is 8's present age?
- 279) 8% children of a class of 25 like getting wet in the rain. How many children like getting wet in the rain.
- 280) 9 is 25% of what number?
- 281) 75% of what number is 15?
- 282) Convert the given fractional numbers to per cents. $\frac{1}{8}$
- 283) Convert the given fractional numbers to per cents. $\frac{5}{4}$
- 284) Convert the given fractional numbers to per cents . $\frac{3}{40}$
- 285) Convert the given fractional numbers to per cents . $\frac{2}{7}$
- 286) Convert the given decimal fractions to per cents. 0.65
- 287) Convert the given decimal fractions to per cents. 2.1
- 288) Convert the given decimal fractions to per cents. 0.02
- 289) Convert the given decimal fractions to per cents 12.35
- 290) Find 15% of 250
- 291) Find 1% of 1 hour
- 292) Find 20% of Rs 2500
- 293) Find 75% of 1 kg
- 294) Rs 10000 is invested at 5% interest rate p.a. Find the interest at the end of one year.
- 295) 3500 is given at 7% p.a. rate of interest. Find the interest which will be received at the end of two years
- 296) You have Rs 2400 in your account and the interest rate is 5%. After how many years would you earn Rs 240 as interest?
- 297) On a certain sum, the interest paid after 3 year is Rs 450 at 5% rate of interest per annum. Find the sum.
- 298) Calculate the following
20% of 200
- 299) Calculate the following
800% of 800
- 300) If cost price of an article is Rs 500 and selling price of that article is Rs 700. Find the gain or loss per cent.
- 301) Find the simple interest on Rs 500 for 3 yr at 10% per annum.
- 302) Aviral purchase a computer for Rs 47000. He had to sell it for Rs 45800. Find his profit on loss per cent
- 303) Express as a percent $\frac{9}{40}$

- 304) Express as a percent $\frac{1}{100}$
- 305) Express as fraction in its lowest terms 80%
- 306) Express as fraction in its lowest terms $33\frac{1}{33}\%$
- 307) If A and B shared Rs.1300 in the ratio 1 :12, how much did A get?
- 308) A sum of Rs.2700 was lent for 10 yr at the rate of 15% per annum. Find the interest and amount.
- 309) A man travelled 60 km by car and 240 km by train. Find what per cent of total journey did he travel by car and what per cent did he travel by train?
- 310) By selling a chair for Rs.1440, a shopkeeper losses 10%. At what price did he buy it?
- 311) Find the ratio of
Rs 6 to 30 paise
- 312) Find the ratio of
15 kg to 300 g
- 313) Find out 8% of 25 kg
- 314) Sachin and Sanjana are calculating 23% of 800. Find it
- 315) Write following decimals as percentage.
6:1
- 316) Write following decimals as percentage. 0.064
- 317) Convert 55% as a fraction.
- 318) Express 150% as a ratio in the lowest form.
- 319) Convert $\frac{35}{25}$ in percentage.
- 320) Convert 0.02 in percentage.
- 321) Are the ratio 2: 5 and 3: 7 equivalent?
- 322) Out of 32 students, 4 are absent. What per cent of students are absent?
- 323) A box has 200 bulbs, out of which 10 are defective bulbs. What per cent are defective bulbs?
- 324) At what rate per cent, will a sum of money triple itself in 10 years?
- 325) Look at the examples below and in each of them, discuss which is better for comparison.

A shirt has



- 326) Can a price of an item go up by 50%?
Can a price of an item go up by 100%?
Can a price of an item go up by 150%?
- 327) Convert the following to percents
3.5
- 328) Convert the following to percents
 $\frac{49}{50}$
- 329) Convert the following to percents
 $\frac{2}{2}$
- 330) Convert the following to percents
0.05
- 331) Write $\frac{3}{4}$ as per cent.
- 332) In a class, there are 15 boys and 25 girls. What is the percentage of girls?
- 333) Express 65% as a fraction
- 334) Express 40% as a ratio.

- 335) Express 115% as a decimal
- 336) Reeta takes 3 parts of rice and 2 parts of urad dal for making idleys. What is percentage of rice in the mixture?
- 337) The population of a state increased from 5,50,000 to 6,05,000. What is the percentage increase in the population?
- 338) (a) What is 90% of 9.9 ?
(b) What percent of one hour is 36 seconds?
- 339) If $3a = 2b$ and $6b = 5c$, find $a:c$
- 340) If $\frac{A}{3} = \frac{B}{4} = \frac{C}{5}$, find $A: B: C$
- 341) Mahesh takes a loan of Rs.50,000 at The rate of interest 12% p. a. Find the simple interest, which he has to pay after two years.
- 342) A shopkeeper sold an article at the profit of 10%. If c.P. = 240, find S.P
- 343) Convert each part of ratio 3 : 1 to percentage.
- 344) What is the rate of interest which gives an interest of Rs 280 on a sum of Rs 56,000 for 2 years?
- 345) 6 bowls cost Rs.90. What would be the cost of 10 such bowls?
- 346) The car that can go 150 km with 25 litres of petrol. How can it go with 30 liters of petrol?
- 347) The cost of a flower vase is Rs.120, if the shopkeeper sells it at a loss of 10%. Find the price at which it is sold?
- 348) Selling price of a toy car is Rs.540, if the profit made by shopkeeper is 20%, what is the cost price of this item?
- 349) Find the measure of $\angle x$ in the figure.



- 350) A TV having price tag of f 10,000 is sold at a profit of 20%. How much money does a customer pay for it?

$$100 \times 3 = 300$$

- 351) Find the ratio of Rs 5 to 50 paise
- 352) Find the ratio of 15 kg to 210 g
- 353) Find the ratio of 9 m to 27 cm
- 354) Find the ratio of 30 days to 36 hours
- 355) In a computer lab, there are 3 computers for every 6 students. How many computers will be needed for 24 students?
- 356) Population of Rajasthan = 570 lakhs and population of UP = 1660 lakhs. Area of Rajasthan = 31akh km² and area of UP = 21akh km².
(i) How many people are there per km² in both these states?
(ii) Which state is less populated?
- 357) A photocopier in a college books hop is able to photocopy 10 pages in 16 s, then how will it take to photocopy 45 pages?
- 358) A grocer buy 10 eggs for Rs 8 and sells 8 eggs for Rs10. Find his gain or loss per cent

359) Rina made a table top of 100 different coloured tiles. She counted yellow, green, red and blue tiles separately and filled the table below. Can you help her complete the table?

Colour	Number of Tiles	Rate per Hundred	Fraction	Written as	Read as
Yellow	14	14	$\frac{14}{100}$	14%	14 per cent
Green	26	26	$\frac{26}{100}$	26%	26per cent
Red	35	35			
Blue	25				
Total	100				

360) Find the percentage of children of different heights for the following data.

Height	Number of Children	In Fraction	In Percentage
110cm	22		
120cm	25		
128cm	32		
130cm	21		
Total	100		

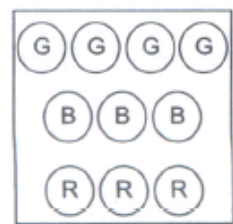
361) A shop has the following number of shoe pairs of different sizes.

Size 2 : 20 Size 3 : 30 Size 4 : 28
Size 5 : 14 Size 6 : 8

Write this information in tabular form as done earlier and find the percentage of each shoe sizes available in the shop.

362) A collection of 10 chips with different colours is given

Colour	Number	Fraction	Denominator	Hundred	In Percentage
Green					
Blue					
Red					
Total					

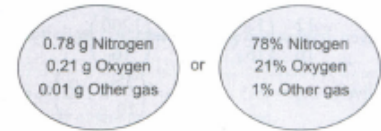


Complete the table and find the percentage of chips of each colour.

363) Mala has a collection of bangles. She has 20 gold bangles and 10 silver bangles. What is the percentage of bangles of each type? Can you put it in the tabular form as done in the above example?

364) Look at the examples below and in each of them, discuss which is better for comparison.

(i) In the atmosphere, 1g of air contains



365) Convert the following to percents

$$\frac{12}{16}$$

366) (i) Can you eat 50% of a cake?

Can you eat 100% of a cake?

Can you eat 150% of a cake?

(ii) Can a price of an item go up by 50%?

Can a price of an item go up by 100%?

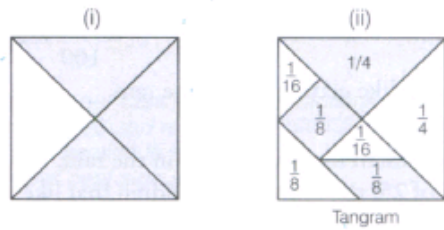
Can a price of an item go up by 150%?

367) If 65% of students in a class have a bicycle, what per cent of the students do not have bicycles?

368) We have a basket full of apples, oranges and mangoes. If 50% are apples, 30% are oranges, then what per cent are mangoes?

369) Consider the expenditure made on a dress. 20% on embroidery, 50% on cloth, 30% on stitching. Can you think of more such examples?

370) What per cent of these figures are shaded?



371) Find
50% of 164

372) Find
75% of 12

373) Find
 $12\frac{1}{2}\%$ of 64

374) Find the whole quantity, if 5% of it is 600

375) Find the whole quantity, if 12% of it is Rs 1080

376) Find the whole quantity, if 40% of it is 500 km

377) Find the whole quantity, if 70% of it is 14 min

378) Find the whole quantity, if 8% of it is 40 L

379) Convert given per cents to decimal fractions and also to fractions in simplest forms.
(a) 25% (b) 150% (c) 20% (d) 5%

380) In a city, 30% are females, 40% are males and remaining are children. What per cent are children?

381) Out of 15000 voters in a constituency, 60 %voted. Find the percentage of voters who did not vote. Can you now find how many actually did not vote?

382) Meeta saves Rs 400 from her salary. If this is 10% of her salary. What is her salary?

383) A local cricket team played 20 matches in one season. It won 25% of them. How many matches did they win?

384) Divide 15 sweets between Manu and Sonu so that they get 20% and 80% of them, respectively.

385) If angles of a triangle are in the ratio 2 : 3: 4. Find the value of each angle.

386) Find percentage of increase or decrease.

(i) Price of shirt decreased from Rs 80 to Rs 60.

(ii) Marks in a test increased from 20 to 30.

387) My mother says, in her childhood petrol was Rs 1 a litre. It is Rs 52 per litre today. By what percentage has the price gone up?

388) A shopkeeper bought a chair for Rs 375 and sold it for Rs 400. Find the gain percentage.

389) Cost of an item is Rs 50. It was sold with a profit of 12%. Find the selling price.

390) An article was sold for Rs 250 with a profit of 5%. What was its cost price?

391) An item was sold for Rs 540 at a loss of 5%. What was its cost price?

392) Rs 6050 is borrowed at 6.5% rate of interest p.a. Find the interest and the amount to be paid at the end of 3 years.

393) Rs 7000 is borrowed at 3.5% rate of interest p.a. borrowed for 2 years. Find the amount to be paid at the end of the second year.

394) Convert each part of the ratio to percentage. 3:1

395) Convert each part of the ratio to percentage. 2:3:5

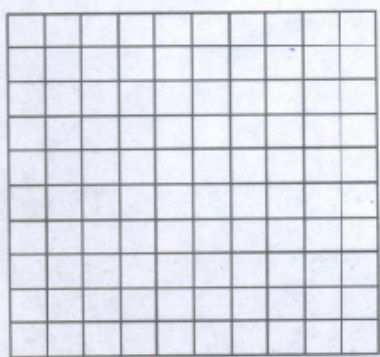
396) Convert each part of the ratio to percentage .1:4

397) Convert each part of the ratio to percentage .1:2:5

- 398) The population of a city decreased from 25000 to 24500. Find the percentage decrease.
- 399) Arun bought a car for Rs 350000. The next year, the price went upto Rs 370000. What was the percentage of price increase?
- 400) Juhi sells a washing machine for Rs 13500. She loses 20% in the bargain. What was the price at which she bought it?
- 401) Amina buys a book for Rs 275 and sells it at a loss of 15%. How much does she sell it for?
- 402) What rate gives Rs 280 as interest on a sum of Rs 56000 in 2 yr?
- 403) If Meena gives an interest of Rs 45 for one year at 9% rate p.a. What is the sum she has borrowed?
- 404) A dealer sold 600 quintal of sugar at a profit of 7%. If one quintal of sugar cost him RS 1600, then find his total profit.
- 405) Find the cost price of an article, which is sold for Rs 220 at a loss of 12%.
- 406) By selling a colour TV for Rs 23520, a dealer suffers a loss of 4%. What is the cost price of the colour TV?
- 407) Dhruvika invested money for a period from May 2006 to May 2008 at a rate of 12% per annum. If interest received by her is Rs.1620, then find the money invested.
- 408) Two numbers are in the ratio 3:4. The difference between their squares is 28, then find the greater number.
- 409) In $a:b = 4:9$, if 4 is added to both of the numbers, the two new ratio becomes 21:46. What is the difference between a and b?
- 410) What percent of 1h is 30 min?
- 411) What percent of 1day is 1 min?
- 412) Find the ratio of 9 m to 36 cm
- 413) Find the ratio of 30 days to 48 h
- 414) What per cent of Rs.80 is Rs.100?
- 415) Find the SI on Rs.500 for 3 yr at 5% per annum.
- 416) If $A : B = 2 : 3$ and $B : C = 7 : 8$. Find $A : B : C$.
- 417) If $A : B = 3 : 4$ and $B : C = 5 : 6$. Find $A : C$.
- 418) Divide 350 in the ratio of 3 : 2.
- 419) A man earns Rs 1500 in 15 days. How much will he earn in 20 days?
- 420) A car travels 225 km in 3 h. How long will it take to travel 150 km?
- 421) The ratio of the income and saving of a family in 8:3. Find the expenditure, if the saving is Rs 1332.
- 422) Two numbers are in the ratio 1: 2. If 4 is added to each of them, the ratio becomes 4: 7. Find the numbers.
- 423) A person sells a watch costing Rs 750 for Rs840. Find his profit or loss per cent.
- 424) Find the whole value/quantities, if 70% of it is 14 h
- 425) Find the whole value/quantities, if 6% of it is 48 km
- 426) Find the whole value/quantities, if 30% of it is 900 km
- 427) Find the whole value/quantities, if 5% of it is 500
- 428) Rs 5000 amounts to Rs 6000 in 5 yr. What will Rs 8000 amount be at the same rate of interest in 6 yr.
- 429) An article is sold for Rs 1980 at 10% profit. What is the cost price?
- 430) The ratio of age of Aman and her mother is 3:11. The difference of their ages is 24 yr. What will be the ratio of their ages after 3 yr?
- 431) A shopkeeper purchased eggs at the rate of 10 for Rs6 and sells them at 6 for Rs 10.Find his profit or loss per cent.
- 432) On what principal, the interest is Rs 1750 for 7 yr at 5% per annum simple interest?

- 433) In an examination, a student must get 40% marks to pass. A student gets 48 marks out of 200. Express his marks as a percentage. How many more marks should he have got to pass the examination?
- 434) The cost price of a scooter is 20000 and the profit percentage is 12% . What is the selling price?
- 435) A certain amount was divided between A and B in the ratio 7: 9 if B's share was Rs 7200, then find total amount.
- 436) Tell what is the profit or loss in the following transactions. Also, find profit per cent or loss per cent in each case.
A refrigerator bought for Rs 12000 and sold at Rs 13500.
- 437) Tell what is the profit or loss in the following transactions. Also, find profit per cent or loss per cent in each case.
A cupboard bought for Rs 2500 and sold at Rs 3000.
- 438) Tell what is the profit or loss in the following transactions. Also, find profit per cent or loss per cent in each case.
A skirt bought for Rs250 and sold at Rs 150.
- 439) Find the ratio of 5 Ian and 400 m.
- 440) Are the ratios 2 : 3 and 3 : 4 equivalent?
- 441) A map is given with a scale of 5 cm = 1000 km. What is the actual distance between the two places in kms, if the distance in the map is 2.5 cm?
- 442) Rs.90,000 borrowed at 5.5% p.a. for 3 years. Find the amount to be paid at the end of third year.
- 443) An article was sold for Rs.280 with a profit of 5%. What was its C.P?
- 444) If a father gave 3 parts of his property to his son and 2 parts of it to his daughter. What are the percentages of his property which were given to his son and daughter?
- 445) To make idlis, Reena's mother said you must take 2 parts rice and 1 part urad dal. Could you say what, percent of such a mixture would be rice or what percent of it would be urad dal?
- 446) If Rs.250 is to be divided amongst Ravi, Raju and Roy so that Ravi gets 2 parts, Raju 3 parts and Roy 5 parts. How much money will each get ? what will it be in percent?
- 447) Mr. Narayan saves 20% of his salary. If he receives Rs. 20,000 per month as his salary,
(a) Find his monthly expenditure.
(b) Which mathematical concept is used in this problem?
(c) What is its value?
- 448) Rupesh scored 350 marks out of 500 in examination of 1st term in his school. In IInd term by hard work he gets 80% marks.
(a) What is his percent increase from 1st term to 2nd term?
(b) Which mathematical concept is used in this problem?
(c) What is its value?
- 449) Two numbers are in the ratio 4 : 5. If 9 is subtracted from each, the ratio becomes 3 : 4. Find the numbers.
- 450) A contractor has a worlforce of 480 men who can finish a certain piece of work in 10 months. How many extra men must he employ to complete the work in 8 months
 $16 \times 4 = 64$
- 451) Out of his total monthly income, Mr. Saxena spends 30% on house rent and 60% of the rest on house hold expenses. If he saves Rs.6,300 per month, what is his total monthly income?
- 452) Find:
(a) 9% of Rs.700
(b) $6\frac{2}{3}\%$ of 75 m
(c) 7'5% of 80 kg
(d) 8% of 5 litres

- 453) Nikhil's income is 20% less than that of Akhil. How much percent is Akhil's income more than that of Nikhil's?
- 454) 3% commission on the sale of a property amounts to is Rs.42,660. What is the total value of the property?
- 455) In an examination, 72% of the total examinees passed. If the number of failures is 392, find the total number of examinees.
- 456) The value of a machine depreciates 5% every year. If the present value of the machine is Rs.1,00,000, what will its value after 2 years?
- 457) A vendor purchased 720 lemons at Rs.120 per hundred. 10% of the lemons were found rotten, which he sold at Rs.50 per hundred. If he sells the remaining lemons at Rs.125 per hundred, then his profit or loss percentage will be?
- 458) In a debate competition, the judges decided that 20% of the total marks would be given for accent and presentation. 60% of the rest are reserved for the subject matter and the rest are for rebuttal. If this means 8 marks for rebuttal, then find the total marks.
- 459) Imagine that a 10 x 10 grid has value 300 and that this value is divided evenly among the small squares. In other words, each small square is worth 3. Use a new grid for each part of this problem, and label each grid "Value: 300."
- (a) Shade 25% of the grid. What is 25% of 300 ? Compare the two answers.
- (b) What is the value of 25 squares.
- (c) Shade 17% of the grid? What is 17% of 300 ? Compare the two answers.
- (d) What is the value os 1/10 of the grid?



- 460) In an examination, 96% of the candidates passed and 54 failed. How many candidates appeared in the examination?
- 461) The price of sugar is increased by 20%. By how much per cent must a family reduce the consumption of sugar so that its expenditure on sugar does not increase?
- 462) If the cost price of 6pens is equal to the selling price of 4 pens, Then find the gain per cent.
- 463) By selling an electric fan for Rs.1440, a trader gains 20%. Find the cost price of the electric fan
- 464) A computer was bought for Rs.24,650 and Rs.350 was spent on its transportation. At what price should it be sold to have a gain of 16%?
- 465) At what rate per cent per annum simple interest will a sum treble itself in 20 years?
- 466) A sum of money becomes Rs.30,000 in 2 years and Rs.32,500 in 3 years. Find the principal and rate of interest per cent per year.

$$42 \times 5 = 210$$

- 467) (i) Out of 32 students, 8 are absent. What per cent of the students are absent?
- (ii) There are 25 radios, 16 of them are out of order. What per cent of radios are out of order?
- (iii) A shop has 500 parts, out of which 5 are defective. What per cent are defective?
- (iv) There are 120 voters, 90 of them voted yes. What per cent voted yes?

468) Observe and complete the following table

Per cent	1%	10%	25%	50%	90%	125%	250%
Fraction	$\frac{1}{100}$	$\frac{10}{100} = \frac{1}{10}$					
Decimal	0.01	0.10					

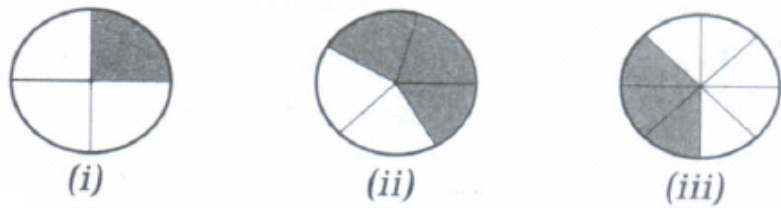
469) $35\% + \% = 100\%$

470) $64\% + 20\% + \% = 100\%$

471) $45\% = 100\% - \dots\dots\dots \%$

472) $70\% = \dots\dots\dots\% - 30\%$

473) Estimate what part of the figures is coloured and hence find the per cent which is coloured.



474) Tell what is the profit or loss in the following transactions. Also, find profit per cent or loss per cent in each case.

Gardening shears bought for Rs 250 and sold for Rs 325.

475) I buy a TV for Rs 10000 and sell it at a profit of 20%. How much money do I get for it?

476) (i) Chalk contains calcium, carbon and oxygen in the ratio 10 : 3 : 12. Find the percentage of carbon in chalk.

(ii) If in a stick of chalk, carbon is 3 g, what is the weight of the chalk stick?

477) Find the amount to be paid at the end of 3 yr in each case.

(a) Principal = Rs 1200 at 12%p.a.

(b) Principal = Rs 7500 at 5%p.a.

478) What is the time period for which Rs 8000 amount to Rs 12000 at 20 per annum of simple interest?

479) What is the rate of simple interest at which Rs 14000 gives interest of Rs1960 in 2 yr?

480) A certain sum of money amounts to Rs 15900 at simple rate of interest at 6% per annum in 5 yr. What is the value of principal sum?

481) What is the time period for which Rs 8000 amount to Rs 12000 at 20 per annum of simple interest?

482) What is the rate of simple interest at which Rs 14000 gives interest of Rs1960 in 2 yr?

483) Five numbers a, b, c, d, and e are in the ratio 2: 3: 5: 8: 9 and their sum is 162. Find the average of all these numbers.

484) Three angles of a triangle are in the ratio of 3: 4: 5. Find the measurement of greatest angle.

485) A man sold a watch Rs.6000 at a loss of $33\frac{1}{3}\%$. Find the cost price of the watch.

486) A shopkeeper buys 100 eggs at Rs.1.20 per egg. Unfortunately, 4 eggs got spoiled during transportation. The shopkeeper sells the remaining eggs at Rs.15 a dozen. Find his profit/loss.

487) What is the amount which gives Rs.6300 as interest at 7% per annum of simple interest in $7\frac{1}{2}$ yr?

488) If the rate of simple interest is 12% per annum, then find the amount that would fetch interest of Rs.6000 per annum.

489) 24 men can complete a job in 40 days, then find the number of men required to complete the job in 32 days.

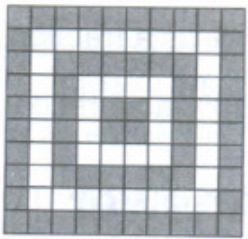
490) Rs.11250 are divided among A,B and C, so that A may receive one-half as much as B and C together receive and B receive one-fourth of what A and C together receive. Find what share of A is more than that of B.

491) Out of 20000 voters in a constituency, 60% voted. Find the percentage of voters who did not vote. Can you find how many actually did not vote?

492) 45% of the population of a town are men and 40% are women. What is the percentage of children?

493) The strength of a school is 2000. If 40% of the students are girls, then how many boys are there in the school?

- 494) Chalk contains 10% calcium, 3% carbon and 12% oxygen. Find the amount of carbon and calcium (in grams) in $2\frac{1}{2}$ kg of chalk.
- 495) The ratio of present ages of A and 8 are 3: 2. 5 yr after, their ages will be in the ratio 14: 11. What are their present ages?
- 496) A man sold two radios for Rs 5000 each. On one he gets a gain of 10% and on other a loss of 10%. Find his total gain or loss per cent in the whole transactions.
- 497) 800 kg of mortar consists of 55% sand, 33% cement and rest lime. What is the mass of lime in mortar?
- 498) In a furniture shop, 24 tables were bought at the rate of Rs 450 per table. The shopkeeper sold 16 of them at the rate of Rs 600 per table and the remaining at the rate of 400 per table. Find his gain or loss per cent.
- 499) Arun divides Rs 10000 between his sons, Anil and Ajay in the ratio 5 : 3. Find the share of each of them.
- 500) The ratio of present ages of A and 8 are 3: 2. 5 yr after, their ages will be in the ratio 14: 11. What are their present ages?
- 501) A man sold two radios for Rs 5000 each. On one he gets a gain of 10% and on other a loss of 10%. Find his total gain or loss per cent in the whole transactions.
- 502) A memorial trust donates Rs 500000 to a school, the interest on which is to be used for awarding 3 scholarships to students obtaining first three positions in the school examination every year. If the donation earns an interest of 12% per annum and the values of second and third scholarships are Rs 20000 and Rs 15000 respectively. Find out the value of the first scholarship. What type of value depicted from donation to a school?
- 503) 6400 were lent to Feroz and Rashmi at 15% per annum for $3\frac{1}{2}$ and 5 yr respectively. What is the difference in the interest paid by them?
- 504) Calculate the per cent that represents the unshaded region in the figure.



- 505) Divide Rs 10000 in two parts, so that the simple interest on the first part for 4 yr at 12% per annum may be equal to the simple interest on the second part for 4.5 yr at 16% per annum.
- 506) A tea merchant blends green tea and lemon tea in the ratio of 5 : 4, introducing a new variety of tea which is mix green herbal and lemon. The cost of green tea is Rs 200 per kg and that of lemon tea is Rs 300 per kg. If he sells the blended tea at the rate of Rs 275 per kg, find out the percentage of his profit or loss. What value depict here?
- 507) Due to budget deficit in a State Government, The State Government imposing an entertainment tax on various type of entertainment programmes, 250 tickets of Rs 400 and 500 tickets of Rs 100 were sold. If the entertainment tax is 40% on ticket of Rs 400 and 20% on ticket of Rs 100, then find how much entertainment tax was collected from the programme and what value depict here?
- 508) Make some more such examples and solve them.
