

Q-1 If -2 and 3 are the zeroes of the quadratic polynomial  $x^2 + (p+1)x + q$ , then what is the value of  $p+q$ .

- (A) -2, -6 (B) 2, 6 (C) 3, 5 (D) -3, 5

Q-2 What is the value of  $k$  for which the quadratic equation  $kx(x-2) + 6 = 0$  has two equal roots

- (A) 4 (B) 6 (C) 5 (D) 0

Q-3 What is value of  $x$   
 $2x^{2/3} - x^{1/3} = 20$

(A)  $y = 4$  or  $y = -\frac{7}{2}$ ,  $x = 64$

(B)  $y = 3$  or  $y = 2$ ,  $x = 60$

(C)  $y = \frac{3}{2}$  or  $y = \frac{5}{7}$ ,  $x = 64$

(D)  $y = 1$  or  $y = -\frac{5}{7}$ ,  $x = 64$

Q-4 The lines  $\frac{4}{3}x + 2y = 8$ ,  $2x + 3y = 12$  are

- (A) Consistent (B) Inconsistent

Q-5 The larger of two supplementary angles exceeds the smaller by 18 degrees. What are they.

- (A) 90, 90 (B) 90, 90 (C) 99, 81,  
 (D) 20, 160

Q-6 Five years hence, the age of Jacob will be three times that of his son. Five years ago, Jacob's age was seven times that of his son. What are

their present ages.

- (A) 40, 10 (B) 30, 20 (C) 10, 15 (D) 20, 40

Q-7 For which values of  $a$  and  $b$  does the pair of linear equations have an infinite no. of solutions

$$2x + 3y = 7$$

$$(a-b)x + (a+b)y = 3a + b - 2$$

- (A)  $a = 4, b = 2$  (B)  $a = 5, b = 1$   
(C)  $a = 3, b = 2$  (D)  $a = 2, b = 1$

Q-8 ~~A~~ Is it possible to design a rectangular park of perimeter 80 m and area  $400 \text{ m}^2$ ?

- (A) Yes (B) No.