

QUADRATIC EQUATION

Directions (1-5): In the following questions two equations numbered (I) and (II) are given. You have to solve both equations and give answer

- (a) if $x > y$
 (b) if $x \geq y$
 (c) if $x < y$
 (d) if $x \leq y$
 (e) If $x = y$ or the relationship cannot be established

Q1. I. $x^2 + 15x + 56 = 0$

II. $y^2 + 17y + 72 = 0$

Q2. I. $2x^2 - 9x + 10 = 0$

II. $9y^2 - 57y + 88 = 0$

Q3. I. $3x + 2y = 7\sqrt{14}$

II. $10x + 14y = 38\sqrt{14}$

Q4. I. $x^2 - 11x + 28 = 0$

II. $y^2 + 3y - 40 = 0$

Q5. I. $x^2 = 361$

II. $y = \sqrt{441}$

II. $y^2 + 17y + 72 = 0$

Directions (6-10): In the following questions two equations numbered I and II are given. You have to solve both the equations and —

- (a) if $x > y$
 (b) if $x \geq y$
 (c) if $x < y$
 (d) if $x \leq y$
 (e) If $x = y$ or the relationship cannot be established

Q6. I. $\frac{25}{x^2} - \frac{12}{x} + \frac{9}{x^2} = \frac{4}{x^2}$
 II. $9.84 - 2.64 = 0.95 + y^2$

Q7. I. $\sqrt{901}x + \sqrt{1295} = 0$
 II. $(257)^{\frac{1}{2}}y + (217)^{\frac{1}{2}} = 0$

Q8. I. $\frac{(3)^2 + (7)^2}{x^3} = x^3$
 II. $7y^{\frac{3}{2}} = -(15 \times 2) + 17y^{\frac{3}{2}}$

Q9. I. $(x^{\frac{1}{4}} \div 16)^2 = 144 \div x^{\frac{3}{2}}$
 II. $y^{\frac{1}{3}} \times y^{\frac{2}{3}} \times 3104 = 16 \times y^2$

Q10. I. $3x^2 - 19x + 28 = 0$
 II. $5y^2 - 18y + 16 = 0$

QUADRATIC EQUATION

Directions (11-15): Two equations (I) and (II) are given in each question. On the basis of these equations, you have to decide the relation between x and y and give answer

- (a) if $x > y$
- (b) if $x \geq y$
- (c) if $x < y$
- (d) if $x \leq y$
- (e) If $x = y$ or the relationship cannot be established

Q11. I. $5x^2 - 87x + 378 = 0$

II. $3y^2 - 49y + 200 = 0$

Q12. I. $14x^2 - 37x + 24 = 0$

II. $28y^2 - 53y + 24 = 0$

Q13. I. $2x^2 - 3x - 35 = 0$

II. $y^2 - 7y + 6 = 0$

Q14. I. $6x^2 - 29x + 35 = 0$

II. $2y^2 - 19y + 35 = 0$

Q15. I. $12x^2 - 47x + 40 = 0$

II. $4y^2 + 3y - 10 = 0$

Directions (Q16-20): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer

- (a) if $p > q$
- (b) if $p \geq q$
- (c) if $p < q$
- (d) if $p \leq q$
- (e) if $p = q$ or there is no relation between 'p' and 'q'.

16)

I. $(p+q)^2 = 3136$

II. $q + 2513 = 2569$

17)

I. $4p^2 - 16p + 15 = 0$

II. $2q^2 + 5q - 7 = 0$

18)

I. $p^2 = 49$

II. $q^2 + 15q + 56 = 0$

19)

I. $2p^2 + 5p - 12 = 0$

II. $2q^2 - q - 1 = 0$

20)

QUADRATIC EQUATION

I. $p^2 - 12p + 35 = 0$

II. $q^2 - 25 = 0$

Answer key:-

- 1)b 2)c 3)c 4)e 5)c 6)e 7)a 8)a 9)e 10)a 11)a 12)b 13)e
14)d 15)e 16)c 17)a 18)b 19)e 20)b

Career Campus