

Practice | Analyze | Perform





www.letsstudytogether.co

# **Quadratic Equation Practice Questions 2021**

1. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 - 15x + 36 = 0$$

II. 
$$10y^2 + 31y - 63 = 0$$

$$D x \ge y$$

Ex = y or relationship cannot be established

#### Correct Answers: B. x > y

#### From equation I:

$$x2 - 15x + 36 = (x - 12)(x - 3) = 0$$

$$=> x = 12, 3$$

#### From equation II:

$$10y2 + 31y - 63 = (5y - 7)(2y + 9) = 0$$

$$=> y = 7/5, -9/2$$

So, 
$$x > y$$

2. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 - 20x + 96 = 0$$

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

$$C x \le y$$

$$D x \ge y$$

E x = y or relationship cannot be established

#### Correct Answers: B. x > y

From equation I:

$$x2 - 20x + 96 = (x - 12)(x - 8) = 0$$

$$=> x = 12, 8$$

From equation II:

$$y2 + y - 6 = (y - 2)(y + 3) = 0$$

$$=> y = 2, -3$$

So, 
$$x > y$$

3. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 16x - 161 = 0$$

II. 
$$y^2 - 31y + 210 = 0$$

$$C x \le y$$

$$D x \ge y$$

E x = y or relationship cannot be established





### Practice | Analyze | Perform



## India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

Correct Answers: A. x < y

=> y = 7/2, -9/5

From equation I:

So, x > y

5. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

From equation II:

I.  $x^2 - x - 42 = 0$ 

$$y2 - 31y + 210 = (y - 10)(y - 21) = 0$$

 $x^2 + 16x - 161 = (x + 23)(x - 7) = 0$ 

II. 
$$y^2$$
 -24 $y$  +128 = 0

$$=> y = 10, 21$$

So, 
$$x < y$$

option.

Ax < y

4. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct

Bx > y

 $C x \leq y$ 

 $D x \ge y$ 

1.  $x^2$  -44x +483 = 0

E x = y or relationship cannot be established

x2 - x - 42 = (x + 6)(x - 7) = 0

II.  $10y^2 - 17y - 63 = 0$ 

Correct Answers: A. x < y

Ax < y

From equation I:

 $C x \leq y$ 

=> x = -6, 7www.letsstudvtogether.co

 $Dx \ge y$ 

From equation II:

E x = y or relationship cannot be established

y2 - 24y + 128 = (y - 8)(y - 16) = 0

Correct Answers: B. x > y

=> y = 8, 16

From equation I:

So, x < y

x2 - 44x + 483 = (x - 21)(x - 23) = 0

=> x = 21.23

6. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct

option.

From equation II:

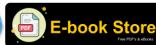
1.  $9x^2 - 9x + 2 = 0$ 

10y2 - 17y - 63 = (2y - 7)(5y + 9) = 0











India's Leading Competitive Exam Preparation Portal

### Practice | Analyze | Perform



www.letsstudytogether.co

II.  $y^2 - 28y + 187 = 0$ 

Bx > y

Ax < y

 $C x \leq y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: A. x < y

From equation I:

9x2 - 9x + 2 = (3x - 1)(3x - 2) = 0

=> x = 1/3, 2/3

From equation II:

y2 - 28y + 187 = (y - 17)(y - 11) = 0

=> y = 17, 11

So, x < y

7. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I.  $x^2 - 11x - 126 = 0$ 

II.  $y^2 + 30y + 224 = 0$ 

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

x2 - 11x - 126 = (x - 18)(x + 7) = 0

=> x = 18, -7

From equation II:

y2 +30y +224 = (y + 16)(y + 14) = 0

=> y = -16, -14

So, x > y

8. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

 $1. x^2 - 15x + 36 = 0$ 

II.  $10y^2 + 43y - 9 = 0$ 

Ax < y

 $C x \leq y$ together.co

 $Dx \ge y$ 

E x = y or relationship cannot be established

Correct Answers: D. x > y

From equation I:

x2 - 15x + 36 = (x - 3)(x - 12) = 0

=> x = 3.12

From equation II:

10y2 + 43y - 9 = (2y + 9)(5y - 1) = 0













#### Practice | Analyze | Perform



### India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

$$=> y = -9/2, 1/5$$

So, 
$$x > y$$

9. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 15x + 54 = 0$$

II. 
$$y^2 - 5y - 66 = 0$$

Ax < y

$$C x \le y$$

$$D x \ge y$$

E x = y or relationship cannot be established

#### Correct Answers: C. x ≤ y

From equation I:

$$x^2 + 15x + 54 = (x + 9)(x + 6) = 0$$

$$=> x = -9, -6$$

From equation II:

$$y2 - 5y - 66 = (y - 11)(y + 6) = 0$$

$$=> y = 11, -6$$

So, 
$$x \le y$$

10. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 9x - 22 = 0$$

II. 
$$y^2 - 33y + 270 = 0$$

Bx>y

$$C x \le y$$

$$D x \ge y$$

E x = y or relationship cannot be established

#### Correct Answers: A. x < y

From equation I:

$$x^2 + 9x - 22 = (x - 2)(x + 11) = 0$$

$$=> x = 2, -11$$

From equation II:

$$y2 - 33y + 270 = (y - 15)(y - 18) = 0$$

$$=> y = 15, 18$$

So, 
$$x < y$$

11. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$6x^2 + 41x + 70 = 0$$

II. 
$$y^2 + 16y - 17 = 0$$

$$C x \leq y$$

$$D x \ge y$$













#### Practice | Analyze | Perform



## India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

Correct Answers: E. x = y or relationship cannot

be established

From equation I:

$$6x^2 + 41x + 70 = (2x + 7)(3x + 10) = 0$$

$$=> x = -7/2, -10/3$$

From equation II:

$$y^2 + 16y - 17 = (y - 1)(y + 17) = 0$$

$$=> y = 1, -17$$

So, relationship cannot be established between x and y

12. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1. 
$$x^2 - 17x + 72 = 0$$

II. 
$$y^2 + 9y - 112 = 0$$

A x < y

Bx > y

 $C x \le v$ 

 $D x \ge y$ 

Ex = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

$$x2 - 17x + 72 = (x - 9)(x - 8) = 0$$

$$=> x = 9, 8$$

From equation II:

y2 + 9y - 112 = (y - 7)(y + 16) = 0

$$=> y = 7, -16$$

So, 
$$x > y$$

13. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 12x - 45 = 0$$

II. 
$$y^2 - 16y + 55 = 0$$

$$Cx \leq y$$

E x = y or relationship cannot be established

Correct Answers: A. x < y

From equation I:

$$x2 + 12x - 45 = (x + 15)(x - 3) = 0$$

$$=> x = -15, 3$$

www.letsstudvtogether.co

From equation II:

$$y2 - 16y + 55 = (y - 5)(y - 11) = 0$$

$$=> v = 5, 11$$

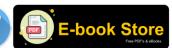
So, 
$$x < y$$

14. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.











### Practice | Analyze | Perform



## India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

I.  $x^2 + 18x + 77 = 0$ 

II.  $y^2 - 14y - 147 = 0$ 

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

Ex = y or relationship cannot be established

Correct Answers: C.  $x \le y$ 

From equation I:

x2 + 18x + 77 = (x + 7)(x + 11) = 0

=> x = -7, -11

From equation II:

y2 - 14y - 147 = (y + 7)(y - 21) = 0

=> y = -7, 21

So,  $x \le y$ 

15. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1.  $x^2 - 42x + 440 = 0$ 

II.  $y^2 - 19y + 88 = 0$ 

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

x2 - 42x + 440 = (x - 20)(x - 22) = 0

=> x = 20, 22

From equation II:

y2 - 19y + 88 = (y - 8)(y - 11) = 0

=> y = 8, 11

So, x > y

16. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1.  $15x^2 - 2x - 24 = 0$ 

II. y<sup>2</sup> -20y +84 = 0

Ax < y

в x > й

Cx≤y

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: A. x < y

From equation I:

15x2 - 2x - 24 = (5x + 6)(3x - 4) = 0

=> x = -6/5, 4/3

From equation II:

y2 - 20y + 84 = (y - 14)(y - 6) = 0













### Practice | Analyze | Perform



### India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

$$=> y = 14, 6$$

So, x < y

17. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 21x + 110 = 0$$

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

Ax < y

 $C x \leq y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

#### Correct Answers: A. x < y

From equation I:

$$x^{2} + 21x + 110 = (x + 10)(x + 11) = 0$$

=> x = -10, -11

From equation II:

$$y2 + 15y + 56 = (y + 8)(y + 7) = 0$$

$$=> y = -8, -7$$

So, 
$$x < y$$

18. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

$$1. x^2 + 8x - 65 = 0$$

II. 
$$y^2 - 37y + 330 = 0$$

Bx > y

C x ≤ y

 $Dx \ge y$ 

E x = y or relationship cannot be established

#### Correct Answers: A. x < y

From equation I:

$$x2 + 8x - 65 = (x - 5)(x + 13) = 0$$

From equation II:

$$y2 - 37y + 330 = (y - 15)(y - 22) = 0$$

So, 
$$x < y$$

19. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + x - 306 = 0$$

II. 
$$y^2 - 12y - 28 = 0$$

Bx>y

 $C x \le y$ 

 $D x \ge y$ 

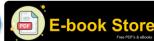
E x = y or relationship cannot be established













### Practice | Analyze | Perform





www.letsstudytogether.co

Correct Answers: E. x = y or relationship cannot

be established

From equation I:

$$x2 + x - 306 = (x - 17)(x + 18) = 0$$

$$=> x = 17, -18$$

From equation II:

$$y2 - 12y - 28 = (y - 14)(y + 2) = 0$$

$$=> y = 14, -2$$

20. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

$$1. x^2 - 40x + 399 = 0$$

II. 
$$y^2 - y - 12 = 0$$

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

Ex = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

$$x2 - 40x + 399 = (x - 21)(x - 19) = 0$$

=> x = 21, 19

From equation II:

$$y2 - y - 12 = (y - 4)(y + 3) = 0$$

$$=> y = 4, -3$$

So, 
$$x > y$$

21. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1. 
$$9x^2 - 64 = 0$$

II. 
$$y^2 + 28y + 147 = 0$$

Ax < y

Bx > y

 $C x \le y$ 

 $Dx \ge y$ 

Ex = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

$$9x2 - 64 = (3x + 8)(3x - 8) = 0$$

$$=> x = -8/3, 8/3$$

From equation II:

$$y2 + 28y + 147 = (y + 21)(y + 7) = 0$$

$$=> y = -21, -7$$

So, 
$$x > y$$

22. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 11x + 30 = 0$$

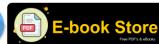
Let's Study Together - India's No.1 Govt. Job Exam Prep. Website - BANK | RBI | SEBI | NABARD | SSC | Railways

www.letsstudvtogether.co











### Practice | Analyze | Perform



## India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

II.  $y^2 - 5y - 50 = 0$ 

A x < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: C.  $x \le y$ 

From equation I:

 $x^2 + 11x + 30 = (x + 6)(x + 5) = 0$ 

=> x = -6, -5

From equation II:

y2 - 5y - 50 = (y - 10)(y + 5) = 0

=> y = 10, -5

So,  $x \le y$ 

23. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1.  $x^2 + 30x + 209 = 0$ 

II.  $10y^2 - 27y - 81 = 0$ 

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: A. x < y

From equation I:

x2 + 30x + 209 = (x + 11)(x + 19) = 0

=> x = -11, -19

From equation II:

10y2 - 27y - 81 = (2y - 9)(5y + 9) = 0

=> y = 9/2, -9/5

So, x < y

24. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

 $1. x^2 - 40x + 396 = 0$ 

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

Ax < y

Bx > y

Cx≤y

 $D x \ge y$ 

E x = y or relationship cannot be established

Correct Answers: B. x > y

From equation I:

x2 - 40x + 396 = (x - 22)(x - 18) = 0

=> x = 22.18

From equation II:

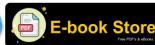
y2 - 7y + 6 = (y - 1)(y - 6) = 0













### Practice | Analyze | Perform



### India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

$$=> y = 1, 6$$

So, x > y

25. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 - x - 132 = 0$$

II.  $y^2 - 31y + 234 = 0$ 

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established

#### Correct Answers: A. x < y

From equation I:

$$x2 - x - 132 = (x + 11)(x - 12) = 0$$

=> x = -11, 12

From equation II:

$$y2 - 31y + 234 = (y - 18)(y - 13) = 0$$

=> y = 18, 13

So, x < y

26. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$15x^2 + 4x - 3 = 0$$

II. 
$$y^2 + 28y + 115 = 0$$

Ax < y

Bx>y

 $C x \le y$ 

 $Dx \ge y$ 

E x = y or relationship cannot be established

#### Correct Answers: B. x > y

From equation I:

$$15x2 + 4x - 3 = (3x - 1)(5x + 3) = 0$$

=> x = 1/3, -3/5

From equation II:

$$y2 + 28y + 115 = (y + 5)(y + 23) = 0$$

$$=> y = -5, -23$$

So, x > y

27. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

1. 
$$6x^2 - 7x - 24 = 0$$

II. 
$$y^2 + 31y + 238 = 0$$

Ax < y

Bx > y

 $C x \le y$ 

 $D x \ge y$ 

E x = y or relationship cannot be established













### Practice | Analyze | Perform



## India's Leading Competitive Exam Preparation Portal

www.letsstudytogether.co

Correct Answers: B. x > y

$$6x2 - 7x - 24 = (3x - 8)(2x + 3) = 0$$

$$=> x = 8/3, -3/2$$

From equation I:

From equation II:

$$y2 + 31y + 238 = (y + 14)(y + 17) = 0$$

$$=> y = -14, -17$$

So, 
$$x > y$$

28. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

$$1. x^2 - 15x - 100 = 0$$

II. 
$$y^2 + 35y + 294 = 0$$

Ax < y

Bx > y

 $C x \leq y$ 

 $Dx \ge y$ 

Ex = y or relationship cannot be established y2 - 39y + 380 = (y - 20)(y - 19) = 0

Correct Answers: B. x > y

From equation I:

$$x2 - 15x - 100 = (x + 5)(x - 20) = 0$$

=> x = -5, 20

From equation II:

$$y2 + 35y + 294 = (y + 21)(y + 14) = 0$$

$$=> y = -21, -14$$

So, 
$$x > y$$

29. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 - 17x - 38 = 0$$

II. 
$$y^2 - 39y + 380 = 0$$

$$C x \leq y$$

$$Dx \ge y$$

E x = y or relationship cannot be established

Correct Answers: C.  $x \le y$ 

From equation I:

$$x2 - 17x - 38 = (x - 19)(x + 2) = 0$$

$$=> x = 19, -2$$

www.letsstudvtogether.co

From equation II:

$$\sqrt{2} - 39y + 380 = (y - 20)(y - 19) = 0$$

$$=> y = 20, 19$$

So, 
$$x \le v$$

30. In the following questions two equations numbered I and II are given. You have to solve both the equations and choose the correct option.

I. 
$$x^2 + 14x + 40 = 0$$





Practice | Analyze | Perform





www.letsstudytogether.co

II.  $y^2 + 28y + 192 = 0$ 

From equation I:

Ax < y

x2 + 14x + 40 = (x + 4)(x + 10) = 0

Bx > y

=> x = -4, -10

 $C x \le y$ 

From equation II:

 $Dx \ge y$ 

y2 + 28y + 192 = (y + 16)(y + 12) = 0

E x = y or relationship cannot be established

=> y = -16, -12

Correct Answers: B. x > y

So, x > y









