TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

Directions (1 – 5): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,

a) If x > y

b) If x ≥ y

c) If x < y

d) If x ≤ y

e) If x = y or the relation cannot be established

1)

I. $12x^2 – 40x + 32 = 0$

II. $8y^2 – 40y + 48 = 0$

2)

I. $9x – 7y = 15$

II. $3x – y = – 3$

3)

I. $12x^2 + 40x + 32 = 0$

II. $8y^2 + 40y + 42 = 0$

4)

I. $4x^2 – 7x – 57 = 0$

II. $5y^2 – 6y – 63 = 0$

5)

I. $12x^2 + 17x – 57 = 0$

II. $4y^2 -7y – 36 = 0$

Directions (6 – 10): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,

a) If x > y

b) If x ≥ y

c) If x < y

d) If x ≤ y

e) If x = y or the relation cannot be established

6)

I. $(x^{12/7} \div 16) = (49 \div x^{2/7})$

II. $y^{31/7} \times y^{4/7} \times 9 = 324 \times y^3$

7)

I. $15x^2 – 40x + 16 = 10x^2 – 22x$

II. $17y^2 +22y + 9 = 13y^2 + 10y$

8)

I. $7x^2 + 37x + 36 = 0$

II. $9y^2 + 35y + 24 = 0$

9)

I. $5x – 4y = -12$

II. $3x + 5y = -59$

10)

I. $15x^2 + 68x + 77 = 0$

II. $3y^2 + 29y + 68 = 0$

Directions (11 – 15): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,

a) If x > y

b) If x ≥ y

c) If x < y

d) If x ≤ y

e) If x = y or the relation cannot be established

11)

I. $5x^2 + 16x – 16 = 0$

II. $4y^2 + 3y – 22 = 0$

12)

I. $x^2 = 4624$

II. $y^3 – 248 = 373000$

13)

I. $x^2 – 4x – 621 = 0$

II. $y^2 – 34y + 285 = 0$

14)

I. $6x + 5y = \sqrt{2809}$

II. $5x + 7y = 64$

15)

I. $x^2 + 7x – 330 = 0$

II. $y = (194481)^{1/4}$

Directions (16 – 20): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,

TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

16)
I. $5x^2 + 16x - 16 = 0$
II. $4y^2 + 3y - 22 = 0$

17)
I. $x^2 = 4624$
II. $y^3 - 248 = 373000$

18)
I. $x^2 - 4x - 621 = 0$
II. $y^2 - 34y + 285 = 0$

19)
I. $6x + 5y = \sqrt{2809}$
II. $5x + 7y = 64$

20)
I. $x^2 + 7x - 330 = 0$
II. $y = (194481)^{1/4}$

Directions (21 – 25): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

21)
I. $x^2 - 9x - 112 = 0$
II. $y^2 + 26y - 87 = 0$

22)
I. $12x^2 + 37x + 28 = 0$
II. $14y^2 + 39y + 27 = 0$

23)
I. $4x^2 + 23x - 72 = 0$
II. $5y^2 - 28y + 32 = 0$

24)
I. $x^2 + 5\sqrt{7} + 42 = 0$
II. $y^2 + 6\sqrt{7} + 56 = 0$

25)
I. $2x^2 - 302 = 420$
II. $y - \sqrt{361} = 0$

Directions (26 – 30): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

26)
I. $5x + 6y = 21$
II. $4x + 5y = 11$

27)
I. $2x^2 + 13x + 20 = 0$
II. $3y^2 - y - 10 = 0$

28)
I. $5x^2 + 12x - 9 = 0$
II. $6y^2 - 13y - 8 = 0$

29)
I. $5x^2 + 3x - 14 = 0$
II. $5y^2 + 8y - 21 = 0$

30)
I. $5x^2 - 6x - 56 = 0$
II. $6y^2 + 9y - 42 = 0$

Directions (31 – 35): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

31)
I. $3x^2 + 14x + 15 = 0$
II. $3y^2 - 13y + 14 = 0$

32)
I. $4x^2 - 6x - 18 = 0$
II. $5y^2 + 6y - 27 = 0$

33)

TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

I. $x^2 - 23x + 102 = 0$
II. $y^2 - 24y - 256 = 0$

34)
I. $5x - 2y = -11$
II. $3x + 5y = -19$

35)
I. $x = \sqrt[4]{4096}$
II. $y = \sqrt[3]{729}$

Directions (36 – 40): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

36)
I. $3x^2 - 18x + 27 = 0$
II. $5y^2 + 11y - 36 = 0$

37)
I. $4x - 5y = 28$
II. $3x + 4y = -10$

38)
I. $x^2 + 18x - 115 = 0$
II. $y^2 + 21y + 98 = 0$

39)
I. $x^2 - 12x - 64 = 0$
II. $y^2 + 13y + 42 = 0$

40)
I. $2x^2 + 9x - 45 = 0$
II. $4y^2 + 19y + 22 = 0$

Directions (41-45): In the following questions, two equations I and II are given. You have to solve both the equations and give Answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

41)
I. $7x^2 + 27x + 18 = 0$
II. $9y^2 + 23y - 12 = 0$

42)
I. $7x - 2y = 25$
II. $5x + 3y = 9$

43)
I. $6x^2 + 17x - 58 = 0$
II. $5y^2 - 2y - 72 = 0$

44)
I. $4x^2 + 40x + 64 = 0$
II. $3y^2 + 44y + 153 = 0$

45)
I. $5x^2 + 27x - 56 = 0$
II. $7y^2 + 11y - 6 = 0$

Directions (46 – 50): In the following questions, two equations I and II are given. You have to solve both the equations and give answer as,
a) If x > y
b) If x ≥ y
c) If x < y
d) If x ≤ y
e) If x = y or the relation cannot be established

46)
I. $x^2 - 12x + 36 = 0$
II. $5y^2 + 4y - 12 = 0$

47)
I. $2x^2 + 12x + 16 = 0$
II. $3y^2 - 7y - 6 = 0$

48)
I. $7x + 2y = -13$
II. $5x - 4y = 7$

49)
I. $x^2 + 2x - 15 = 0$
II. $y^2 + y - 56 = 0$

50)
I. $\sqrt{25}\, x + \sqrt{5625} = 0$
II. $(243)^{1/5} y + (1728)^{1/3} = 0$

Answers:

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TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

1) Answer: d)

I. $12x^2 – 40x + 32 = 0$

$12x^2 – 24x – 16x + 32 = 0$

$12x(x – 2) – 16(x – 2) = 0$

$(12x – 16) (x – 2) = 0$

$X = 16/12, 2 = 1.33, 2$

II. $8y^2 – 40y + 48 = 0$

$8y^2 – 16y – 24y + 48 = 0$

$8y(y – 2) – 24(y – 2) = 0$

$(8y – 24) (y – 2) = 0$

$Y = 3, 2$

$x \leq y$

2) Answer: a)

$9x – 7y = 15$–> (1)

$3x – y = – 3$—> (2)

By solving the equation (1) and (2), we get,

$X = -3, y = -6$

$x > y$

3) Answer: e)

I. $12x^2 + 40x + 32 = 0$

$12x^2 + 24x + 16x + 32 = 0$

$12x(x + 2) + 16(x + 2) = 0$

$(12x + 16) (x + 2) = 0$

$X = -16/12, -2 = -1.33, -2$

II. $8y^2 + 40y + 42 = 0$

$8y^2 + 12y + 28y + 42 = 0$

$4y (2y + 3) + 14(2y + 3) = 0$

$(4y + 14) (2y + 3) = 0$

$Y = -14/4, -3/2 = -3.5, -1.5$

Can't be determined

4) Answer: e)

I. $4x^2 – 7x – 57 = 0$

$4x^2 + 12x – 19x – 57 = 0$

$4x(x + 3) – 19(x + 3) = 0$

$(4x – 19)(x + 3) = 0$

$X = 19/4, -3 = 4.75, – 3$

II. $5y^2 – 6y – 63 = 0$

$5y^2 + 15y – 21y – 63 = 0$

$5y(y + 3) – 21(y + 3) = 0$

$(5y – 21) (y + 3) = 0$

$Y = 21/5, -3 = 4.2, -3$

Can't be determined

5) Answer: e)

I. $12x^2 + 17x – 57 = 0$

$12x^2 – 36x + 19x – 57 = 0$

$12x(x – 3) + 19(x – 3) = 0$

$(12x + 19) (x – 3) = 0$

$X = -19/12, 3 = -1.58, 3$

II. $4y^2 -7y – 36 = 0$

$4y^2 -16y + 9y – 36 = 0$

$4y(y – 4) + 9(y – 4) = 0$

$(4y + 9) (y – 4) = 0$

$Y = – 9/4, 4 = 2.25, 4$

Can't be determined

6) Answer: e)

I. $(x^{12/7} \div 16) = (49 \div x^{2/7})$

$X^{12/7} \times x^{2/7} = 49 \times 16$

$X^{14/7} = 49 \times 16$

$X^2 = 49 \times 16$

$X = + (7*4), – (7*4) = +28, -28$

II. $y^{31/7} \times y^{4/7} \times 9 = 324 \times y^3$

$Y^{31/7 + 4/7 – 3} = 324/9$

$Y^2 = 36$

$Y = 6, -6$

Can't be determined

7) Answer: a)

I. $15x^2 – 40x + 16 = 10x^2 – 22x$

$5x^2 – 18x + 16 = 0$

$5x^2 -10x – 8x + 16 = 0$

$5x(x – 2) -8(x – 2) = 0$

$(5x – 8) (x – 2) = 0$

$X = 8/5, 2 = 1.6, 2$

II. $17y^2 +22y + 9 = 13y^2 + 10y$

$4y^2 + 12y + 9 = 0$

$4y^2 + 6y + 6y + 9 = 0$

$2y (2y + 3) + 3(2y + 3) = 0$

$(2y + 3) (2y + 3) = 0$

$Y = -3/2, -3/2 = -1.5, -1.5$

$x > y$

8) Answer: e)

I. $7x^2 + 37x + 36 = 0$

$7x^2 + 28x + 9x + 36 = 0$

$7x (x + 4) +9(x + 4) = 0$

$(7x + 9)(x + 4) = 0$

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X = -9/7, -4 = -1.28, -4
II. $9y^2 + 35y + 24 = 0$
$9y^2 + 27y + 8y + 24 = 0$
9y(y + 3) + 8(y + 3) = 0
(9y + 8) (y + 3) = 0
Y = -8/9, -3 = -0.89, -3
Can't be determined

9) Answer: c)
5x – 4y = -12 —> (1)
3x + 5y = -59 —> (2)
By solving the equation (1) and (2), we get,
X = -8, y = -7
x< y

10) Answer: a)
I. $15x^2 + 68x + 77 = 0$
$15x^2 + 35x + 33x + 77 = 0$
5x (3x + 7) +11 (3x + 7) = 0
(5x + 11) (3x + 7) = 0
X = -11/5, -7/3 = -2.2, -2.33
II. $3y^2 + 29y + 68 = 0$
$3y^2 + 12y + 17y + 68 = 0$
3y(y + 4) + 17(y + 4) = 0
(3y + 17) (y +4) = 0
Y = -17/3, -4 = – 5.67, -4
x> y

11) Answer: e)
I. $5x^2 + 16x – 16 = 0$
$5x^2 + 20x – 4x – 16 = 0$
5x(x + 4) – 4 (x + 4) = 0
(5x – 4) (x + 4) = 0
X = 4/5, -4 = 0.8, -4
II. $4y^2 + 3y – 22 = 0$
$4y^2$ -8y + 11y – 22 = 0
4y(y – 2) + 11 (y – 2) = 0
(4y + 11) (y – 2) = 0
Y = -11/4, 2 = -2.75, 2
Can't be determined

12) Answer: c)
I. $x^2 = 4624$
X = 68, -68
II. $y^3 – 248 = 373000$
$y^3 = 373000 + 248 = 373248$
y = 72
x < y

13) Answer: e)
I. $x^2 – 4x – 621 = 0$
(x +23) (x – 27) = 0
X = -23, 27
II. $y^2 – 34y + 285 = 0$
(y – 19)(y – 15) = 0
Y = 19, 15
Can't be determined

14) Answer: c)
I. 6x + 5y = √2809
6x + 5y = 53 -à(1)
II. 5x + 7y = 64
5x + 7y = 64 –à(2)
By solving the equation (1) and (2), we get,
X = 3, y = 7
x< y

15) Answer: c)
I. $x^2 + 7x – 330 = 0$
(x – 15) (x + 22) = 0
X = 15, -22
II. y = √441
Y = 21
x< y

16) Answer: e)
I. $5x^2 + 16x – 16 = 0$
$5x^2 + 20x – 4x – 16 = 0$
5x(x + 4) – 4 (x + 4) = 0
(5x – 4) (x + 4) = 0
X = 4/5, -4 = 0.8, -4
II. $4y^2 + 3y – 22 = 0$
$4y^2$ -8y + 11y – 22 = 0
4y(y – 2) + 11 (y – 2) = 0
(4y + 11) (y – 2) = 0
Y = -11/4, 2 = -2.75, 2
Can't be determined

17) Answer: c)
I. $x^2 = 4624$
X = 68, -68
II. $y^3 – 248 = 373000$
$y^3 = 373000 + 248 = 373248$

TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

y = 72
x < y

18) Answer: e)

I. $x^2 – 4x – 621 = 0$
(x +23) (x – 27) = 0
X = -23, 27
II. $y^2 – 34y + 285 = 0$
(y – 19)(y – 15) = 0
Y = 19, 15
Can't be determined

19) Answer: c)

I. 6x + 5y = √2809
6x + 5y = 53 ->(1)
II. 5x + 7y = 64
5x + 7y = 64 –>(2)
By solving the equation (1) and (2), we get,
X = 3, y = 7
x< y

20) Answer: c)

I. $x^2 + 7x – 330 = 0$
(x – 15) (x + 22) = 0
X = 15, -22
II. y = √441
Y = 21
x < y

21). Answer: e)

I. $x^2 – 9x – 112 = 0$
$x^2 – 16x + 7x – 112 = 0$
x(x – 16) + 7(x – 16) = 0
(x + 7) (x – 16) = 0
X = -7, 16
II. $y^2 + 26y – 87 = 0$
$y^2 + 29y – 3y – 87 = 0$
y (y + 29) – 3(y + 29) = 0
(y – 3) (y + 29) = 0
Y = 3, -29
Can't be determined

22) Answer: e)

I. $12x^2 + 37x + 28 = 0$
$12x^2 + 16x + 21x + 28 = 0$
4x(3x + 4) + 7(3x + 4) = 0
(4x+ 7) (3x + 4) = 0
X = -7/4, -4/3 = -1.75, -1.33
II. $14y^2 + 39y + 27 = 0$
$14y^2 + 21y + 18y + 27 = 0$
7y(2y + 3) + 9(2y + 3) = 0
(7y + 9) (2y + 3) = 0
Y = -9/7, -3/2 = -1.28, -1.5
Can't be determined

23) Answer: e)

I. $4x^2 + 23x – 72 = 0$
$4x^2 + 32x – 9x – 72 = 0$
4x (x + 8) – 9(x + 8) = 0
(4x – 9) (x + 8) = 0
X = 9/4, -8 = 2.25, -8
II. $5y^2 – 28y + 32 = 0$
$5y^2 – 20y – 8y + 32 = 0$
5y(y – 4) – 8 (y – 4) = 0
(5y – 8) (y – 4) = 0
Y = 8/5, 4 = 1.6, 4
Can't be determined

24) Answer: e)

I. $x^2 + 5√7 + 42 = 0$
$x^2 + 3√7x + 2√7x + 42 = 0$
x (x + 3√7) + 2√7 (x + 3√7) = 0
(x + 2√7) (x + 3√7) = 0
X = – 2√7, -3√7
II. $y^2 + 6√7 + 56 = 0$
$y^2 + 4√7y + 2√7y + 56 = 0$
y(y + 4√7) +2√7 (y + 4√7) = 0
(y + 2√7) (y + 4√7) = 0
Y = -2√7, -4√7
Can't be determined

25) Answer: d)

I. $2x^2 – 302 = 420$
$2x^2 = 302+ 420$
$2x^2 = 722$
$X^2 = 361$
X = 19, -19
II. y – √361 = 0
Y = √361
Y = 19
x ≤ y

26) Answer: a)

TOP 50 Quadratic Equation Questions for Bank PO & Clerk Exams

5x + 6y = 21—à (1)
4x + 5y = 11—à(2)
By solving the equation (1) and (2), we get,
X = 39, y = – 29
x> y

27) Answer: d)

I. $2x^2 + 13x + 20 = 0$
$2x^2 + 8x + 5x + 20 = 0$
2x(x + 4) + 5(x + 4) = 0
(2x + 5) (x + 4) = 0
X = -5/2, -4

II. $3y^2 – y – 10 = 0$
$3y^2 – 6y + 5y – 10 = 0$
3y(y – 2) + 5(y – 2) = 0
(3y + 5) (y – 2) =0
Y = -5/2, 2
x ≤ y

28) Answer: e)

I. $5x^2 + 12x – 9 = 0$
$5x^2 + 15x – 3x – 9 = 0$
5x(x + 3) -3 (x + 3) = 0
(5x – 3) (x + 3) = 0
X = 3/5, -3

II. $6y^2 – 13y – 8 = 0$
$6y^2 + 3y – 16y – 8 = 0$
3y (2y + 1) -8(2y + 1) = 0
(3y – 8) (2y + 1) = 0
Y = 8/3, -1/2
Can't be determined

29) Answer: e)

I. $5x^2 + 3x -14 = 0$
$5x^2 + 10x – 7x -14 = 0$
5x(x + 2) – 7(x+ 2) = 0
(5x – 7) (x + 2) = 0
X = 7/5, -2

II. $5y^2 + 8y – 21 = 0$
$5y^2 + 15y – 7y – 21 = 0$
5y(y + 3) – 7(y + 3) = 0
(5y – 7) (y + 3) = 0
Y = 7/5, -3
Can't be determined

30) Answer: e)

I. $5x^2 – 6x – 56 = 0$
$5x^2 – 20x + 14x – 56 = 0$
5x(x – 4) + 14 (x – 4) = 0
(5x + 14) (x – 4) = 0
X = -14/5, 4 = -2.8, 4

II. $6y^2 + 9y – 42 = 0$
$6y^2$ -12y + 21y – 42 = 0
6y(y – 2) + 21(y – 2) = 0
(6y + 21) (y – 2) = 0
Y = -21/6, 2 = -3.5, 2
Can't be determined

31) Answer: c)

I. $3x^2$ +14x +15 = 0
$3x^2$ +9x + 5x + 15 = 0
3x(x+3) + 5(x+3) = 0
(3x+5) (x+3) = 0
X= -5/3, -3

II. $3y^2$ -13y +14 = 0
$3y^2 – 6y – 7y +14 = 0$
3y(y-2)-7 (y-2) = 0
(3y-7)(y – 2) = 0
Y= 7/3, 2
x <y

32) Answer: e)

I. $4x^2 – 6x – 18 = 0$
$4x^2 – 12x + 6x – 18 = 0$
4x(x – 3) + 6(x – 3) = 0
(4x + 6) (x – 3) = 0
X = -6/4, 3 = -3/2, 3 = -1.5, 3

II. $5y^2 + 6y – 27 = 0$
$5y^2 + 15y – 9y – 27 = 0$
5y(y + 3) – 9(y + 3) = 0
(5y – 9)(y + 3) = 0
Y = 9/5, -3 = 1.8, -3
Can't be determined

33) Answer: e)

I. $x^2 – 23x + 102 = 0$
$x^2 – 6x – 17y + 102 = 0$
x(x – 6)- 17(x- 6) = 0
(x – 17)(x – 6) = 0
X = 17, 6

II. y^2– 24y – 256 = 0

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$y^2 - 32y + 8y - 256 = 0$
$y(y - 32) + 8(y - 32) = 0$
$(y + 8)(y - 32) = 0$
Y = -8, 32
Can't be determined

34) Answer: c)
$5x - 2y = -11$-----(1)
$3x + 5y = -19$------(2)
By solving the equation (1) and (2), we get,
x = -3, y = -2
x < y

35) Answer: c)
I. $x = \sqrt[4]{4096}$
X = 8, -8
II. $y = \sqrt[3]{729}$
Y = 9
x < y

36) Answer: a)
I. $3x^2 - 18x + 27 = 0$
$3x^2 - 9x - 9x + 27 = 0$
$3x(x - 3) - 9(x - 3) = 0$
$(3x - 9)(x - 3) = 0$
X = 9/3, 3 = 3, 3
II. $5y^2 + 11y - 36 = 0$
$5y^2 + 20y - 9y - 36 = 0$
$5y(y + 4) - 9(y + 4) = 0$
$(5y - 9)(y + 4) = 0$
Y = 9/5, – 4 = 1.8, -4
x> y

37) Answer: a)
$4x - 5y = 28$ -à (1)
$3x + 4y = -10$ –à (2)
By solving the equation (1) and (2),
X = 2, y = – 4
X > y

38) Answer: e)
I. $x^2 + 18x - 115 = 0$
$x^2 + 23x - 5x - 115 = 0$
$x(x + 23) - 5(x + 23) = 0$
$(x - 5)(x + 23) = 0$
X = 5, – 23
II. $y^2 + 21y + 98 = 0$
$y^2 + 14y + 7y + 98 = 0$
$y(y + 14) + 7(y + 14) = 0$
$(y + 7)(y + 14) = 0$
Y = -7, -14
Can't be determined

39) Answer: a)

I. $x^2 - 12x - 64 = 0$

$x^2 + 4x - 16x - 64 = 0$

$x(x + 4) - 16(x + 4) = 0$

$(x - 16)(x + 4) = 0$

X = 16, – 4

II. $y^2 + 13y + 42 = 0$

$y^2 + 6y + 7y + 42 = 0$

$y(y + 6) + 7(y + 6) = 0$

$(y + 7)(y + 6) = 0$

Y = -7, -6
x> y

40) Answer: e)
I. $2x^2 + 9x - 45 = 0$
$2x^2 - 6x + 15x - 45 = 0$
$2x(x - 3) + 15(x - 3) = 0$
$(2x + 15)(x - 3) = 0$
X = -15/2, 3 = -7.5, 3
II. $4y^2 + 19y + 22 = 0$
$4y^2 + 8y + 11y + 22 = 0$
$4y(y + 2) + 11(y + 2) = 0$
$(4y + 11)(y + 2) = 0$
Y = -11/4, -2 = -2.75, – 2
Can't be determined

41) Answer: e)
I. $7x^2 + 27x + 18 = 0$
$7x^2 + 21x + 6x + 18 = 0$

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7x(x + 3) + 6(x + 3) = 0
(7x + 6)(x + 3) = 0
X = -6/7, -3 = -0.85, -3
II. $9y^2 + 23y - 12 = 0$
$9y^2 + 27y - 4y - 12 = 0$
9y(y + 3) – 4(y + 3) = 0
(9y – 4) (y + 3) = 0
Y = 4/9, -3 = 0.44, -3
Can't be determined

42) Answer: a)
7x – 2y = 25 –à (1)
5x + 3y = 9 –à (2)
By solving the equation (1) and (2), we get,
X = 3, y = -2
x> y

43) Answer: e)
I. $6x^2 + 17x - 58 = 0$
$6x^2 - 12x + 29x - 58 = 0$
6x(x – 2) + 29(x – 2) = 0
(6x + 29) (x – 2) = 0
X = -29/6, 2 = -4.83, 2
II. $5y^2 - 2y - 72 = 0$
$5y^2 - 20y + 18y - 72 = 0$
5y(y – 4) + 18(y – 4) = 0
(5y + 18) (y – 4) = 0
Y = -18/5, 4 = – 3.6, 4
Can't be determined

44) Answer: e)
I. $4x^2 + 40x + 64 = 0$
$4x^2 + 8x + 32x + 64 = 0$
4x(x + 2) +32(x + 2) = 0
(4x + 32) (x + 2) = 0
X = -32/4, -2 = -8, -2
II. $3y^2 + 44y + 153 = 0$
$3y^2 + 27y + 17y + 153 = 0$
3y(y + 9) +17(y + 9) = 0
(3y + 17) (y + 9) = 0
Y = -17/3, -9 = -5.67, -9
Can't be determined

45) Answer: e)
I. $5x^2 + 27x - 56 = 0$
$5x^2 + 35x - 8x - 56 = 0$
5x(x + 7) – 8(x + 7) = 0
(5x – 8) (x + 7) = 0
X = 8/5, -7 = 1.6, – 7
II. $7y^2 + 11y - 6 = 0$
$7y^2 + 14y - 3y - 6 = 0$
7y(y + 2) – 3(y + 2) = 0
(7y – 3) (y + 2) = 0
Y = 3/7, -2 = 0.428, -2
Can't be determined

46) Answer: a)
I. $x^2 - 12x + 36 = 0$
(x – 6)(x – 6) = 0
X = 6, 6
II. $5y^2 + 4y - 12 = 0$
$5y^2 + 10y - 6y - 12 = 0$
5y (y + 2) – 6 (y + 2) = 0
(5y – 6) (y + 2) = 0
Y = 6/5, – 2 = 1.2, -2
x > y

47) Answer: c)
I. $2x^2 + 12x + 16 = 0$
$2x^2 + 4x + 8x + 16 = 0$
2x(x + 2) + 8(x + 2) = 0
(2x + 8)(x + 2) = 0
X = -4, -2
II. $3y^2 - 7y - 6 = 0$
$3y^2 - 9y + 2y - 6 = 0$
3y(y – 3) + 2(y – 3) = 0
(3y + 2) (y – 3) = 0
Y = – 2/3, 3 = -0.667, 3
x < y

48) Answer: a)
7x + 2y = -13–à (1)
5x – 4y = 7–à (2)
By solving the equation (1) and (2), we get,
X = – 1, y = -3
x> y

49) Answer: e)
I. $x^2 + 2x - 15 = 0$
(x + 5) (x – 3) = 0
X = -5, 3
II. $y^2 + y - 56 = 0$

(y + 8) (y – 7) = 0
Y = -8, 7
Can't be determined

50) Answer: c)

I. √25 x + √5625 = 0
5x = – 75
X = -15

II. $(243)^{1/5}$ y + $(1728)^{1/3}$ = 0
$(3^5)^{1/5}$ y = – $(12^3)^{1/3}$
3y = -12
Y = -4
x< y