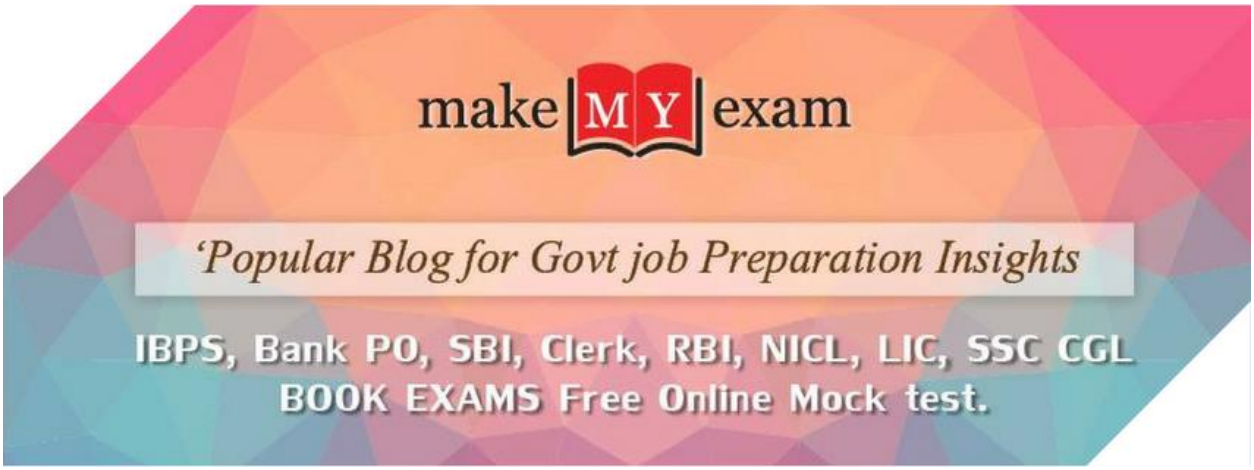

Most Important Quadratic Equation 100 Questions PDF

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QUADRATIC EQUATIONS

1. I. $2x^2+x-21 = 0$
II. $3y^2+4y+32 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

2. I. $x^2-6x+135 = 0$
II. $y^2-30y+225 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

3. I. $\frac{25}{\sqrt{x}} - 4\sqrt{x} = \sqrt{x}$
II. $2y + \frac{y^2+50}{y} = 5y$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

4. I. $x^2-43x+462 = 0$
II. $y^2-37y+342 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

5. I. $\sqrt{x} + \frac{28}{\sqrt{x}} = 5\sqrt{x}$
II. $\sqrt{y} + \frac{y+35}{\sqrt{y}} = 7\sqrt{y}$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

6. I. $\frac{12}{\sqrt{x}} + \frac{8}{\sqrt{x}} = 8\sqrt{x}$
II. $\frac{\sqrt{y}}{4} + \frac{5\sqrt{y}}{12} = \frac{1}{\sqrt{y}}$
(A) x > y (B) x ≥ y
(C) x < y (D) x ≤ y
(E) x = y or the relationship cannot be established

7. I. $\frac{8}{\sqrt{x}} + \frac{6}{\sqrt{x}} = \sqrt{x}$
II. $y^3 - \frac{(14)^{\frac{7}{2}}}{\sqrt{y}} = 0$
(A) x > y (B) x ≥ y
(C) x < y (D) x ≤ y
(E) x = y or the relationship cannot be Established.

8. I. $\frac{25}{x^2} - \frac{12}{x} + \frac{9}{x^2} = \frac{4}{x^2}$
II. $9.84-2.64 = 0.95 + y^2$
(A) x > y (B) x ≥ y
(C) x < y (D) x ≤ y
(E) x = y or the relationship cannot be Established.

9. I. $\frac{3^4+5^3}{2} = x^3$
II. $12y^3 = -(15\times20) + 17y^3$
(A) x > y (B) x ≥ y
(C) x < y (D) x ≤ y
(E) x = y or the relationship cannot be Established.

10. I. $(x-8)(2y+9) = 25$
II. $(2x-16)(y-4) = 8$
(A) x < y (B) x ≥ y
(C) x >y (D) x ≤ y
(E) x = y or the relationship cannot be established

11. I. $4x^2-25x+25 = 0$
II. $2y^2-13y+21 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

12. I. $2x^2-6x-48 = 0$
II. $y^2-13y+42 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

13. I. $3\sqrt{x}-\frac{18}{\sqrt{x}} = \sqrt{x}$
II. $2\sqrt{y}+\frac{y-36}{\sqrt{y}} = -\sqrt{y}$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

14. I. $4x^4 = \frac{128}{x}$
II. $\sqrt{y}+\frac{15y}{\sqrt{y}} = 4y^{\frac{5}{2}}$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

15. I. $(x-8)(2y+9) = 25$
II. $(2x-16)(y-4) = 8$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

16. I. $x^2-50x+621 = 0$
II. $y^2-42y+437 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

17. I. $\frac{32}{\sqrt{x}}+\sqrt{x} = 5\sqrt{x}$
II. $3y+\frac{y^2+64}{y} = 5y$
(A) x>y (B) x≥y
(C) x≤y (D) x<y
(E) x= y or no relation

18. I. $\frac{3^3+6^2}{7} = x^2$
II. $17y^3 = (15\times9) + 12y^3$
(A) $x > y$ (B) $x \geq y$
(C) $x < y$ (D) $x \leq y$
(E) x = y or the relationship cannot be established

19. I. $6x^2-19x-36 = 0$
II. $4y^2-47y+120 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

20. I. $4x^4 = \frac{128}{x}$
II. $\sqrt{y}+\frac{15y}{\sqrt{y}} = 4y^{\frac{5}{2}}$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

21. I. $2x^2+21x+34 = 0$
II. $3y^2+23y+42 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

22. I. $x^2-15x-364 = 0$
II. $y^2+31y+240 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

23. I. $x^2 - 3481=0$
II.$y^2 -118y +3481=0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

24. I. $2x^2+11x+15 = 0$
II. $4y^2+16y+15 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

25. I. $x^3 - 9x^2 + 20x = 0$
II. $y^3 -14y^2 + 48y = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

26. I. $2x^2+x-6 = 0$
II. $3y^2+y-8 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

27. I. $7x + 4y = 5$
II. $5x + 3y = 3$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

28. I. $\frac{25}{\sqrt{x}} - 2\sqrt{x} = 3\sqrt{x}$
II. $2y + \frac{y^2+50}{y} = 5y$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

29. I. $x^2+4x-28 = 0$
II. $y^2-12y+32 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

30. I. $2x^2-6x-48 = 0$
II. $y^2-13y+42 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

31. I. $8x + 6y = 52$
II. $7x + 5y = 45$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

32. I. $x^2 = 36$
II. $y^2 + 11y + 30 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

33. I. $2x^2+21x+34 = 0$
II. $3y^2+23y+42 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

34. I. $x^2–15x–364 = 0$
II. $y^2+31y+240 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

35. I. $x^2 – 3481=0$
II.$y^2 –118y +3481=0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

36. I. $x^2+14x+48 = 0$
II. $y^2+11y+30 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

37. I. $x^2–14x+49 = 0$
II. $y^2–13y+40 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

38.I. $3\sqrt{x}-\frac{18}{\sqrt{x}} = \sqrt{x}$
II. $2\sqrt{y}+\frac{y-36}{\sqrt{y}}= -\sqrt{y}$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

39. I. $2x^2–5x–18 = 0$
II. $y^2–13y+42 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

40. I. $3x^2–27x+54 = 0$
II. $2y^2–9y+10 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x=y or no relation

41. I. $\frac{6^3+9^2}{11} = x^3$
II. $15y^3= (36×18) + 12y^3$

(A) x > y (B) x ≥ y
(C) x < y (D) x ≤ y
(E) x = y or the relationship cannot be established

42. I. $x^2-50x+621 = 0$
II. $y^2-42y+437 = 0$
(A) x>y (B) x<y
(C) x≤y (D) x≥y
(E) x= y or no relation

43. I. $x^2-33x-270 = 0$
II. $y^2+37y+342 = 0$
(A) x>y (B) x<y
(C) x≥y (D) x≤y
(E) x= y or no relation

44. I. Quantity I : $x^2+25x+136 = 0$
II. Quantity II : $x^2-7x-120 = 0$
(A) Quantity I > Quantity II
(B) Quantity I < Quantity II
(C) Quantity I ≥ Quantity II
(D) Quantity I ≤ Quantity II
(E) Quantity I = Quantity II OR relationship cannot be determined.

45. I. Quantity I: $4x^4 = \frac{128}{x}$
II. Quantity II: $\sqrt{x}+\frac{15x}{\sqrt{x}} = 4x^{\frac{5}{2}}$
(A) Quantity I > Quantity II
(B) Quantity I < Quantity II
(C) Quantity I ≥ Quantity II
(D) Quantity I ≤ Quantity II
(E) Quantity I = Quantity II OR relationship cannot be determined.

Direction (Q. 46-50): In the following question, one or two equation(s) is/are given. You have to solve both the equations and find the relation between 'x' and 'y' and mark correct answer.
(A) x > y (B) x ≥ y
(C) x< y (D) x ≤ y
(E) x = y or the relation cannot be determined

46. I. $x^2 + 6x + 8 = 0$
II. $y^2 + 7y + 12 = 0$

47. I. $2x^2 + 15x + 13 = 0$
II. $y^2 - 7y + 12 = 0$

48. I. $x^3 - 375 = 3000$
II. $y^3 + 600 = 769$

49. I. $x^2 + 84x + 468 = 0$
II. $y^2 + 3y + 2 = 0$

50. I. $x^2 - 7x + 12 = 0$
II. $y^2 + 12y + 32 = 0$

Directions (Q. 51-55) :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 < y
(C) If x ≥ y (D) If x ≤ y
(E) If x = y, or no relation can be established between x and y.

51. I. $5x^2 - 87x + 378 = 0$
II. $3y^2 - 49y + 200 = 0$

52. I. $10x^2 - x - 24 = 0$
II. $y^2 - 2y = 0$

53. I. $x^2 - 5x + 6 = 0$
II. $2y^2 - 15y + 27 = 0$

54. I. $3x + 2y = 301$
II. $7x - 5y = 74$

55. I. $14x^2 - 37x + 24 = 0$
II. $28y^2 - 53y + 24 = 0$

Direction (Q. 55-60): In the following questions two equations numbered I and II are given. You have to solve both the equations and give answer–
(A) If x > y (B) If x ≥ y
(C) If x < y (D) If x ≤ y
(E) If x = y or the relationship can't be established

56. I. $5x + 3y = 16$
II. $3x + 2y = 34$

57. I. $x^2 - 7x + 12 = 0$
II. $y^2 + 12y + 32 = 0$

58. I. $x^2 - 9 = 0$
II. $y^2 + 6y + 9 = 0$

59. I. $x^2 + 38x + 192 = 0$
II. $y^2 - 18y + 65 = 0$

60. I. $x^4 - 1000 = 296$
II. $y^2 + 330 = 346$

Direction (Q. 61-65): In the following questions two equations numbered I and II are given. You to solve both the equations and give answer
(A) if x > y (B) if x ≥ y
(C) if x < y (D) if x ≤ y
(E) if x = y or the relationship cannot be established.

61. I. $4x - 9y = 5$
II. $x - 5y = -1$

62. I. $x^2 = 225$
II. $y = \sqrt{1369}$

63. I. $x = \sqrt{5.76}$
II. $y + x^2 = 0.36$

64. I. $21x^2 - 26x + 5 = 0$
II. $y = \sqrt{0.1024}$

65. I. $x^2 - 6x + 8 = 0$
II. $y^2 - 14y + 48 = 0$

Directions (Q. 66-70) : In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer

(A) if x > y (B) if x ≥ y

(C) if x < y (D) if x ≤ y

(E) if x= y or relation cannot be established between 'x' and 'y'.

66. I. $x^2 + 3x - 40 = 0$

II. $y^2 - 14y + 48 = 0$

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

II. $y^2 + 5y + 6 = 0$

68. I. $2x^2 + 13x + 21 = 0$

II. $2y^2 + 27y + 88 = 0$

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

II. $y^2 + 12y + 36 = 0$

70. I. $2x^2 + x - 1 = 0$

II. $2y^2 - 3y + 1 = 0$

Directions (Q. 71-75) : Two equations I and II are given below in each question. You have to solve these equations and give answer

(A) if x < y (B) if x > y

(C) if x ≤ y (D) if x ≥ y

(E) if x = y or no relation can be established.

71. I. $225\ x^2 - 4 = 0$

II. $\sqrt{225}\ y + 2 = 0$

72. I. $\frac{3}{\sqrt{x}} + \frac{4}{\sqrt{x}} = \sqrt{x}$

II. $y^3 - \frac{(7)^{\frac{7}{2}}}{\sqrt{y}} = 0$

73. I. $9x - 15.45 = 54.55 + 4x$

II. $\sqrt{y + 155} - \sqrt{36} = \sqrt{49}$

74. I. $x^2 + 9x + 18 = 0$

II. $y^2 - 13y + 40 = 0$

75. I. $\sqrt{x + 6} = \sqrt{121} - \sqrt{36}$

II. $y^2 + 112 = 473$

Directions (Q. 76-80):Two equations I and II are given below in each question. You have to solve these equations and give answer:

(A) if x < y (B) if x > y

(C) if x ≤ y (D) if x ≥ y

(E) if x = y or no relation can be established.

76. I. $(441)^{\frac{1}{2}}\ x^2 - 111 = (15)^2$

II. $\sqrt{121}\ y^2 + (6)^3 = 260$

77. I. $17\ x + (13)^2 - 114 = (15)^2$

II. $\sqrt{121}\ y^2 + (6)^3 = 260$

78. I. $17\ x = (13)^2 + \sqrt{196} + (5)^2 + 4\ x$

II. $9\ y - 345 = 4\ y - 260$

79. I. $6\ y^2 + \frac{1}{2} = \frac{7}{2}\ y$

II. $12\ x^2 + 2 = 10\ x$

80. I. $4\ x^2 = 49$

II. $9\ y^2 - 66\ y + 121 = 0$

Directions (Q. 81-85) : Two equations I and II are given below in each question. You have to solve these equations and give answer:
(A) if x < y (B) if x > y
(C) if x < y (D) if x > y
(E) if x = y of no relation can be established.

81. I. 4 x + 7 y = 209
II. 12 x – 14 y = – 38

82. I. 6 x2 – 25 x + 25 = 0
II. 15 y2 – 16 y + 4 = 0

83. I. 6 x + 5 y = 30 xy
II. 5 x + 6 y = 35 xy

84. I. $\frac{9}{\sqrt{x}} + \frac{19}{\sqrt{x}} = \sqrt{x}$
II. y5 $- \frac{(2\times14)^{\frac{11}{2}}}{\sqrt{y}} = 0$

85. I. $\sqrt{784}$ x + 1234 = 1486
II. $\sqrt{1089}$ y + 2081 = 2345

Directions (Q. 86-90) : Two equations I and II are given below in each question. You have to solve these equations and give answer.
(A) if x < y (B) if x > y
(C) if x < y (D) if x > y
(E) if x = y or no relation can be established.

86. I. $\sqrt{x+18} = \sqrt{144} - \sqrt{49}$
II. y2 + 409 = 473

87. I. y2 – x2 = 32
II. y – x = 2

88. I. $\sqrt{x} - \frac{\sqrt{5}}{\sqrt{x}} = 0$
II. y3 – $5^{\left(\frac{3}{2}\right)}$ = 0

89. I. 8 x2 + 78 x + 169 = 0
II. 20 y2 – 117 y + 169 = 0

90. I. $\frac{15}{\sqrt{x}} + \frac{9}{\sqrt{x}} = 11\sqrt{x}$
II. $\frac{\sqrt{y}}{4} + \frac{5\sqrt{y}}{12} = \frac{1}{\sqrt{y}}$

Directions (Q. 91-95): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer.
(A) if x > y (B) if x ≥ y
(C) if x < y (D) if x ≤ y
(E) if x = y or the relationship between x and y cannot be established

91. I. $4x^2 - x - 3 = 0$
II. $y^2 + 4y + 4 = 0$

92. I. $x = \sqrt{5329}$
II. $y = \sqrt[3]{12167}$

93. I. $3x^2 - 59x + 210 = 0$
II. $2y^2 - 17y + 36 = 0$

94. I. $15x^2 - 41x + 28 = 0$
II. $7y^2 - 29y + 30 = 0$

95. I. $x^2 = -14x$
II. $y^2 + 18y + 80 = 0$

Directions (Q. 96-100) : Two equations I and II are given below in each question. You have to solve these equations and give answer
(A) if $x < y$ (B) if $x > y$
(C) if $x \leq y$ (D) if $x \geq y$
(E) if $x = y$ of no relation can be established.

96. I. $x^2 = 4$
II. $y^2 + 4y = -4$

97. I. $3x + 2y - 58 = 0$
II. $4x + 4y = 92$

98. I. $4x^2 - 8x + 3 = 0$
II. $2y^2 - 7y + 6 = 0$

99. I. $18x^2 + 18x + 4 = 0$
II. $12y^2 + 29y + 14 = 0$

100. I. $17x^2 + 48x = 9$
II. $13y^2 = 32y - 12$