

Find the numerical values corresponding to  $a$ ,  $b$  and  $c$  of the general quadratic equation  $ax^2 + bx + c = 0$  for each of the following quadratic equations:

1.  $6x^2 + 9x + 5 = 0$

4.  $9x^2 + 11x - 2 = 0$

2.  $x^2 - 3x + 7 = 0$

5.  $x^2 - 4x - 9 = 0$

3.  $10x^2 - x - 6 = 0$

6.  $4x^2 + 6x - 5 = 0$

Solve by formula and check:

1.  $x^2 + 6x + 5 = 0$

14.  $3x^2 + 5x + 2 = 0$

2.  $x^2 + 9x + 20 = 0$

15.  $6x^2 - 13x + 6 = 0$

3.  $x^2 + 12x + 35 = 0$

16.  $2x^2 - x - 6 = 0$

4.  $x^2 - 9x + 8 = 0$

17.  $6x^2 - 17x + 12 = 0$

5.  $x^2 - 8x + 15 = 0$

18.  $4x^2 + 4x - 8 = 0$

6.  $x^2 - 12x + 27 = 0$

19.  $x^2 + 8x = -12$

7.  $x^2 + 2x - 3 = 0$

20.  $6x^2 - 13x = 5$

8.  $x^2 + 4x - 12 = 0$

21.  $3x^2 + 6x = 24$

9.  $x^2 + 5x - 14 = 0$

22.  $x^2 + 10x + 25 = 0$

10.  $x^2 - 3x - 4 = 0$

23.  $x^2 - 14x + 49 = 0$

11.  $x^2 - 9x - 36 = 0$

24.  $x^2 - 8x + 16 = 0$

12.  $x^2 - 4x - 12 = 0$

25.  $x^2 - 4x = 0$

13.  $2x^2 + 3x - 20 = 0$

26.  $2x^2 - 7x = 0$

(Continued):

27.  $6x^2 + 5x = 0$

28.  $x^2 - 49 = 0$

29.  $4x^2 - 1 = 0$

30.  $16x^2 - 9 = 0$

31.  $2x^2 - 3x + 6 = x^2 + 2x$

32.  $x^2 - 3(x + 7) = x$

33.  $(x + 2)^2 = 2(5x - 2)$

34.  $x^2 - 6 = 0$

35.  $2x^2 - 14 = 0$

36.  $4x^2 - 40 = 0$

37.  $x^2 - 12 = 0$

38.  $3x^2 - 60 = 0$

39.  $2x^2 - 36 = 0$

40.  $4x^2 - 5 = 0$

41.  $5x^2 - 9 = 0$

42.  $8x^2 - 3 = 0$

43.  $x^2 + 3x - 1 = 0$

44.  $2x^2 + 9x + 3 = 0$

45.  $4x^2 + x - 1 = 0$

46.  $x^2 + 7x + 1 = 0$

47.  $5x^2 + 5x - 1 = 0$

48.  $2x^2 + 7x - 13 = 0$

49.  $x^2 + 3x - 9 = 0$

50.  $3x^2 - 6x + 1 = 0$

51.  $4x^2 + 2x - 3 = 0$

52.  $\frac{x^2}{2} + \frac{3x}{4} = 11$

53.  $\frac{x}{4} + \frac{1}{2} = \frac{2}{x}$

54.  $\frac{x}{2x - 1} = \frac{2x + 3}{15}$

Solve by formula and check. Find roots correct to nearest hundredth:

1.  $x^2 - 5x + 3 = 0$

2.  $x^2 - 1.7x - .6 = 0$

3.  $2x^2 + 5x + 1 = 0$

4.  $.16x^2 + 1.6x - 12 = 0$

5.  $3x^2 + 4x - 3 = 0$

6.  $.2x^2 - 1.75x + 1.2 = 0$

Solve using quadratic formula:

1.  $t^2 - 9t + 20 = 0$

18.  $r^2 + 4r - 4 = 0$

2.  $r^2 + 9r - 10 = 0$

19.  $2y^2 + 4y + 1 = 0$

3.  $x^2 + 10x - 2 = 0$

20.  $t^2 + 12t - 9 = 0$

4.  $y^2 + 6y - 1 = 0$

21.  $3x^2 - 7x = 3$

5.  $2n^2 + 4n + 1 = 0$

22.  $5z^2 - 8z = 2$

6.  $3p^2 - 7p - 3 = 0$

23.  $x^2 + 6x + 7 = 0$

7.  $t^2 - 2t - 5 = 0$

24.  $3x^2 + 5x + 1 = 0$

8.  $r^2 + 4r + 1 = 0$

25.  $4x^2 + 7x + 2 = 0$

9.  $3y^2 = 4y + 2$

26.  $2x^2 - 8x + 3 = 0$

10.  $3s = 1 - 2s^2$

27.  $4x^2 - 6x + 1 = 0$

11.  $5x^2 + 2x = 2$

28.  $2x^2 - 5x - 12 = 0$

12.  $5y - 2 = 3y^2$

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

13.  $5t^2 = 5t$

30.  $x^2 + 4x = 3$

14.  $3k^2 = 14$

31.  $x^2 + 6x = 4$

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

32.  $x^2 = 2x + 1$

16.  $n^2 - 4n - 6 = 0$

33.  $x^2 = 11 - x$

17.  $s^2 - 6s - 1 = 0$

34.  $20x^2 - 17x = -3$

Solve using quadratic formula: (Continued)

35.  $10x^2 - 17x = -3$

52.  $2x^2 - x = 10$

36.  $3x^2 - x = 0$

53.  $4y^2 - 9y + 2 = 0$

37.  $5x^2 - 17 = 0$

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

38.  $2x^2 + 11x + 3 = 0$

55.  $z^2 - 2z - 35 = 0$

39.  $x^2 - 18x + 4 = 0$

56.  $3y^2 - 7y + 2 = 0$

40.  $3x^2 - 14x - 5 = 0$

57.  $2w^2 + 3w - 2 = 0$

41.  $5x^2 + 8x = 3$

58.  $3x^2 - 2x - 5 = 0$

42.  $4x^2 + 12x + 7 = 0$

59.  $5x^2 = x + 4$

43.  $x^2 + 5x + 6 = 0$

60.  $2x^2 = 15 - x$

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

45.  $2x^2 + 5x + 2 = 0$

46.  $2y^2 - 7y + 3 = 0$

47.  $4t^2 - 9t + 2 = 0$

48.  $2w^2 + w = 1$

49.  $3y^2 = 20 - 7y$

50.  $12x^2 + 5x - 2 = 0$

51.  $4a^2 = 3 - a$

