

Solve each:

1.  $2x + 7 = 10$
2.  $3y + 9 = 16$
3.  $5b + 12 = 15$
4.  $8a + 11 = 17$
5.  $4x + 15 = 25$
6.  $8 + 6m = 12$
7.  $45 = 12b + 24$
8.  $64 = 4y + 59$
9.  $48 = 18 + 9x$
10.  $5y - 4 = 6$
11.  $3a - 5 = 16$
12.  $2b - 3 = 17$
13.  $8x - 16 = 24$
14.  $7d - 32 = 31$
15.  $9x - 57 = 15$
16.  $10y - 21 = 9$
17.  $6x - 48 = 6$
18.  $12m - 71 = 25$
19.  $19 = 2x - 5$
20.  $21 = 4b - 3$
21.  $56 = 8y - 10$
22.  $53 = 5m - 7$
23.  $33 = 2y - 5$
24.  $23 = 6x - 67$
25.  $12 = 4a - 16$
26.  $48 = 9r - 87$
27.  $40 = 10x - 40$
28.  $8x - 32 = 0$
29.  $5r + 60 = 0$
30.  $7a - 12 = 0$
31.  $9d - 6 = 0$
32.  $4m + 3 = 0$
33.  $18y - 12 = 0$
34.  $0 = 3b - 9$
35.  $0 = 4x - 5$
36.  $0 = 8d + 2$
37.  $1.8c + 32 = 122$
38.  $30 + .6t = 45$
39.  $$.05n - $.12 = \$3.88$
40.  $1.8c + 32 = 194$
41.  $200 + .25s = 325$
42.  $.06p + 800 = 920$
43.  $\frac{4d}{5} = 8$
44.  $\frac{9a}{10} = 81$
45.  $\frac{5x}{8} = 75$
46.  $56 = \frac{7c}{8}$
47.  $72 = \frac{8n}{9}$
48.  $\frac{3x}{16} = 96$

Solve each: (Continued)

49.  $4x = 8 + 2x$

50.  $7a = 12 + a$

51.  $6b = 36 - 3b$

52.  $9y = 4y + 30$

53.  $8x = 65 - 5x$

54.  $17n = 5n + 72$

55.  $3a + 10 = 8a$

56.  $5x + 6 = 7x$

57.  $4b + 7 = 5b$

58.  $9m + 24 = 11m$

59.  $240 + .4s = s$

60.  $\$17 + .32s = s$

61.  $6a - 20 = 2a$

62.  $9x - 18 = 3x$

63.  $5b - 48 = b$

64.  $12y - 35 = 7y$

65.  $15x - 36 = 11x$

66.  $21m - 63 = 12m$

67.  $2b = 7b - 15$

68.  $5a = 9a - 32$

69.  $x = 7x - 78$

70.  $8d = 11d - 36$

71.  $3x = 15x - 84$

72.  $6y = 3ly - 100$

73.  $2x + 1 = 4 + x$

74.  $5x + 3 = 15 + 2x$

75.  $3 + 9y = 11 + 7y$

76.  $9 + 6z = z + 34$

77.  $5x + 2 = 3x + 8$

78.  $13n + 95 = 5n + 7$

79.  $6r - 4 = 20 - 2r$

80.  $5x - 2 = 28 - x$

81.  $4d - 3 = 3d - 1$

82.  $10x - 22 = 8x - 10$

83.  $6x - 3 = 15 - 3x$

84.  $21y - 52 = 8y - 13$

85.  $3x - 2 = 3 + 2x$

86.  $9y - 5 = 7y + 3$

87.  $z + 2 = 34 - 3z$

88.  $2x - 6 = x + 3$

89.  $2 + 7x = 11 - 2x$

90.  $7 + 11n = 97 - 7n$

91.  $25 - 4x = 4x + 1$

92.  $18 - 5x = 2x + 4$

93.  $5n + 2 = 8n - 7$

94.  $8 + 2w = 5w - 13$

95.  $-x + 17 = 4x + 2$

96.  $40 - 8y = 13y - 26$

97.  $2x + 3 = 7 + 6$

98.  $5y - 2 = 17 - 4$

99.  $8 + 7y = 12 + 24$

100.  $20 - 10 = 6b - 8$

Solve each: (Continued)

$$101. \quad 13 - 4 = 10x - 11$$

$$102. \quad 37 + 14 = 12n - 9$$

$$103. \quad 4r + 2r = 18 + 3r$$

$$104. \quad 7x + 2x = 8x + 4$$

$$105. \quad -a + 3a = a + 6$$

$$106. \quad 3x - 2x = 24 - x$$

$$107. \quad 4b - 3b = 5b - 28$$

$$108. \quad 27 + 7y = 6y + 4y$$

$$109. \quad 2x + 5x + 5 = 40$$

$$110. \quad x + x + 10 = 20$$

$$111. \quad y + 2y + 3y + 30 = 360$$

$$112. \quad x + x + 1 + x + 2 = 21$$

$$113. \quad 77 - x - 2x - 6x - 5 = 0$$

$$114. \quad s + s + 4 + s + s + 4 = 40$$

Solve each by factoring:

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

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

3.  $2x^2 + 6x = 0$

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

5.  $28x^2 - 7x = 0$

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

7.  $4x^2 - 8x = 0$

8.  $21y^2 - 7y = 0$

9.  $8a^2 - 24a = 0$

10.  $9x^2 + 27x = 0$

11.  $x^2 + 8x + 7 = 0$

12.  $x^2 + 9x + 18 = 0$

13.  $y^2 + 3y + 2 = 0$

14.  $a^2 - 5a + 4 = 0$

15.  $x^2 + 11x + 18 = 0$

16.  $x^2 + 9x + 14 = 0$

17.  $x^2 - 11x + 30 = 0$

18.  $x^2 - 12x + 32 = 0$

19.  $a^2 + 7a + 6 = 0$

20.  $x^2 + 17x + 16 = 0$

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

22.  $x^2 + 12x + 27 = 0$

23.  $y^2 + 24y + 23 = 0$

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

25.  $x^2 + 10x + 21 = 0$

26.  $x^2 - 16x + 15 = 0$

27.  $x^2 - 6x + 9 = 0$

28.  $x^2 + 11x + 28 = 0$

29.  $x^2 + 13x + 30 = 0$

30.  $x^2 - 12x + 11 = 0$

31.  $x^2 - 14x = -49$

32.  $x^2 = 7x - 10$

33.  $x^2 = 11x - 24$

34.  $x^2 = 12x - 36$

35.  $x^2 + 10x = -25$

36.  $x^2 = -14x - 33$

37.  $x^2 = 13x - 40$

38.  $x^2 + 4x - 21 = 0$

39.  $x^2 = 6x + 16$

40.  $x^2 - 3x = 18$

41.  $a^2 + 3a = 10$

42.  $x^2 + 2x = 24$

43.  $x^2 - 9x = 22$

44.  $x^2 + 4x = 32$

45.  $x^2 - 36 = -9x$

46.  $x^2 - 63 = 2x$

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

48.  $x^2 + x = 12$

49.  $x^2 - 9x = 10$

50.  $x^2 = x + 30$

Solve each by factoring: (Continued)

$$51. \quad x^2 + 12x = 28$$

$$52. \quad x^2 = 5x + 36$$

$$53. \quad x^2 = 64 - 12x$$

$$54. \quad x^2 = 24 - 10x$$

$$55. \quad x^2 = 42 - y$$

$$56. \quad x^2 - x = 72$$

$$57. \quad x^2 + 6x = 27$$

$$58. \quad x^2 + 11x = 26$$

$$59. \quad x^2 = 7x + 30$$

$$60. \quad x^2 - 3x = 28$$

Solve each by factoring:

1.  $x^2 + 10x + 9 = 0$

2.  $a^2 + 20 = 9a$

3.  $y^2 - 21 = 4y$

4.  $a^2 + 4a = 32$

5.  $b^2 - 8b + 7 = 0$

6.  $a^2 = 4a + 32$

7.  $n^2 + 56 = 15n$

8.  $a^2 + 2a = 48$

9.  $n^2 - 5n = 50$

10.  $x^2 + 11x + 18 = 0$

11.  $x^2 + 8x = -15$

12.  $y^2 + y = 12$

13.  $x^2 - 9x = 22$

14.  $b^2 + 4b = 5$

15.  $x^2 + 10x = 11$

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

17.  $y^2 - y = 42$

18.  $x^2 + 14x + 45 = 0$

19.  $x^2 = 2x + 48$

20.  $y^2 = 14y - 24$

21.  $n^2 = 8n - 12$

22.  $x^2 + 2x = 15$

23.  $x^2 + 10x = -21$

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

25.  $y^2 + y = 20$

26.  $y^2 + 5y = 36$

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

28.  $x^2 + x = 72$

29.  $y^2 + 24y = 52$

30.  $x^2 + 8x = 48$

31.  $x^2 - 19x + 90 = 0$

32.  $y^2 - 15y = -56$

33.  $a^2 - 47a = -90$

34.  $x^2 + 21x + 90 = 0$

35.  $x^2 + 33x + 90 = 0$

36.  $14 - 15x + x^2 = 0$

37.  $42 + 17x + x^2 = 0$

38.  $x^2 + 17x = -52$

39.  $x^2 + 20x + 51 = 0$

40.  $x^2 = 22x - 72$

41.  $x^2 - 22x + 57 = 0$

42.  $y^2 - 23y = -60$

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

44.  $y^2 + 5y = 6$

45.  $x^2 - 2x = 3$

46.  $y^2 + 5y = 14$

47.  $x^2 - x = 42$

48.  $y^2 - 5y = 24$

49.  $x^2 + 16x = 36$

50.  $y^2 + 3y = 10$

Solve each by factoring: (Continued)

$$51. \ x^2 - 4x = 60$$

$$52. \ a^2 - 2a = 8$$

$$53. \ x^2 - 4x = -4$$

$$54. \ x^2 + 20x + 100 = 0$$

$$55. \ x^2 - 81 = 0$$

$$56. \ 2x^2 - 6x = 0$$

$$57. \ 3y^2 + 9y = 0$$

$$58. \ 5x^2 - 15x = 0$$

$$59. \ 5x^2 - 12x = 0$$

$$60. \ 7y^2 - 18y = 0$$

Solve each by factoring:

1.  $3x^2 + 4x + 1 = 0$

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

3.  $3a^2 = 8a - 5$

4.  $5x^2 = 7x - 2$

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

6.  $4x^2 = 7x + 2$

7.  $6b^2 = 5b + 25$

8.  $6x^2 = 7x - 2$

9.  $8r^2 - 6r = 9$

10.  $8x^2 + 3 = 10x$

11.  $9y^2 + 15y + 6 = 0$

12.  $10x^2 + 14x + 4 = 0$

13.  $6x^2 + 11x = 21$

14.  $6x^2 + 19x = -15$

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

16.  $2b^2 + 5b + 3 = 0$

17.  $6x^2 + 4x = 1$

18.  $3y^2 - 5y = 2$

19.  $7x^2 + 13x = 2$

20.  $4x^2 + 5x = 9$

21.  $8y^2 - 14y - 4 = 0$

22.  $4x^2 = 8x + 5$

23.  $6y^2 = 23y - 7$

24.  $4c^2 = -6c - 2$

25.  $6x^2 = 10 - 11x$

26.  $10y^2 + 10 = 29y$

27.  $10x^2 = 31x + 14$

28.  $15y^2 + 17y = 4$

29.  $2a^2 + 9a + 9 = 0$

30.  $2x^2 + 7x = -3$

31.  $3x^2 = 10x - 8$

32.  $3x^2 = 2 - x$

33.  $2x^2 = 3x + 9$

34.  $6x^2 = 19x - 3$

35.  $4a^2 = 5 + a$

36.  $6y^2 = 15 - y$

37.  $8x^2 = 3 - 2x$

38.  $6x^2 = 90 - 21x$

39.  $6x^2 + 15x + 6 = 0$

40.  $12y^2 = 11y - 2$

41.  $12x^2 = 12 - 7x$

42.  $20y^2 = 11y + 4$

43.  $6x^2 = 6x$

44.  $8x^2 - 32x = 0$

45.  $3y^2 + 18y + 24 = 0$

46.  $2x^2 - 4x - 48 = 0$

47.  $4x^2 = 60 - 8x$

48.  $5x^2 = 5x$

49.  $4x^2 - 36 = 0$

50.  $2x^2 - 50 = 0$

Solve each by factoring: (Continued)

$$51. \quad 4x^2 = 96 + 8x$$

$$52. \quad 5y^2 - 40y = 100$$

$$53. \quad x - 3x^2 = 0$$

$$54. \quad 7x^2 = 56x - 49$$

$$55. \quad 3x^2 - 24x = -45$$

$$56. \quad 4x^2 = 64$$

$$57. \quad 4x - 4x^2 + 8 = 0$$

$$58. \quad 2a^3 - 8a = 0$$

$$59. \quad 3x^2 + 30x = -27$$

$$60. \quad 1 - 64x^2 = 0$$

