Lesson 10.5 Factoring Completely

Factor each expression completely.

13.
$$5b^2 + 20b - 60$$

16.
$$4b^2 + 26b - 14$$

19.
$$3x^2 - 3y^2$$

22.
$$2y^3 - 4y^2 - 48y$$

25.
$$2a^3 - 2a$$

28.
$$3t^3 - 27t$$

31.
$$2x^2 + 12x - 80$$

34.
$$3x^3 - 33x^2 + 84x$$

37.
$$2a^2 + 14a + 24$$

40.
$$7a^2 - 14a - 105$$

43.
$$6t^2 - 15t^3$$

46.
$$n^2 + 5n + 7$$

49. $a^2 + 25$

52. $y^4 - 6y^2 - 16$

55. $x^3 - x$

58. $x^2 + 4y^2$

14.
$$2x^2 + 10x - 28$$

17.
$$12x^2 - 10x - 12$$

20.
$$24a^2 - 54b^2$$

23.
$$2m^3 - 20m^2 + 18m$$

26.
$$4b^2 - 24b + 20$$

29.
$$3x^2 + 6x - 24$$

32.
$$5y^2 - 45y - 110$$

35.
$$x^4 - 9x^2$$

38.
$$5y^2 - 45$$

41.
$$3x^2 + 12x + 45$$

44.
$$2 - 128t^2$$

47.
$$3a^2 + a - 2$$

50.
$$q^2 - 12q - 28$$

53.
$$49c^2 + 70c + 25$$

56.
$$a^4 - 16$$

59.
$$2xy + 2yz + z^2 - x^2$$

15.
$$6x^2 - 21x - 12$$

18.
$$18a^2 + 21a - 9$$

21.
$$3b^2 - 3b$$

24.
$$6z^3 - 3z^2 - 30z$$

27.
$$12m^2 + 33m - 9$$

30.
$$4x^2 - 32x + 60$$

33.
$$2t^2 - 28t + 98$$

36.
$$5x^2 + 60x - 140$$

39.
$$st^2 - st - 20s$$

42.
$$x^2 - 6x + 9$$

45.
$$ab^2 - ab - 72a$$

48.
$$2a^2 - 5a + 3$$

51.
$$2x^2 - 14x + 24$$

54.
$$5a^2 - 80$$

57.
$$1 - 4y^2$$

60.
$$2 - 2y^2$$