POLYNOMIAL ADDITION AND SUBTRACTION Use a vertical format or a horizontal format to add or subtract.

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47. $(9x^3 + 12) + (16x^3 - 4x + 2)$

49. $(3x + 2x^2 - 4) - (x^2 + x - 6)$

51. $(-7x^2 + 12) - (6 - 4x^2)$

53. $(-9z^3 - 3z) + (13z - 8z^2)$

55. $(6t^2 - 19t) - (3 - 2t^2) - (8t^2 - 5)$

56. $(7y^2 + 15y) + (5 - 15y + y^2) + (24 - 17y^2)$

57. $\left(x^4 - \frac{1}{2}x^2\right) + \left(x^3 + \frac{1}{3}x^2\right) + \left(\frac{1}{4}x^2 - 9\right)$

58. $(10w^3 + 20w^2 - 55w + 60) + (-25w^2 + 15w - 10) + (-5w^2 + 10w - 20)$

59. $(9x^4 - x^2 + 7x) + (x^3 - 6x^2 + 2x - 9) - (4x^3 + 3x + 8)$

60. $(6.2b^4 - 3.1b + 8.5) + (-4.7 + 5.8b^2 - 2.4b^4)$

61. $(-3.8y^3 + 6.9y^2 - y + 6.3) - (-3.1y^3 + 2.9y - 4.1)$

62. $\left(\frac{2}{5}a^4 - 2a + 7\right) - \left(-\frac{3}{10}a^4 + 6a^3\right) - (2a^2 - 7)$

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Find the product.

36. $(d - 5)(d + 3)$ 37. $(4x + 1)(x - 8)$ 38. $(3b - 1)(b - 9)$

39. $(9w + 8)(11w - 10)$ 40. $(11t - 30)(5t - 21)$ 41. $(9.4y - 5.1)(7.3y - 12.2)$

42. $(3x + 4)\left(\frac{2}{3}x + 1\right)$ 43. $\left(n + \frac{6}{5}\right)(4n - 10)$ 44. $\left(x + \frac{1}{8}\right)\left(x - \frac{9}{8}\right)$

45. $(2.5z - 6.1)(z + 4.3)$ 46. $(t^2 + 6t - 8)(t - 6)$ 47. $(-4s^2 + s - 1)(s + 4)$

Find the product.

27. $(x + 4)(x - 4)$ 28. $(x - 3)(x + 3)$ 29. $(3x + 1)(3x - 1)$

30. $(6x + 5)(6x - 5)$ 31. $(a + 2b)(a - 2b)$ 32. $(4n - 8m)(4n + 8m)$

33. $(3y + 8)^2$ 34. $(9 - 4t)(9 + 4t)$ 35. $\left(2x + \frac{1}{2}\right)\left(2x - \frac{1}{2}\right)$

36. $(-5 - 4x)^2$ 37. $(3s + 4t)(3s - 4t)$ 38. $(-a - 2b)^2$

P593.

Tell whether the statement is *true* or *false*. If the statement is false, rewrite the right-hand side to make the statement true.

39. $(9x + 8)(9x - 8) \stackrel{?}{=} 81x^2 - 64$ 40. $(6y - 7w)^2 \stackrel{?}{=} 36y^2 - 49w^2$

41. $\left(\frac{1}{3}a + 3b\right)^2 \stackrel{?}{=} \frac{1}{9}a^2 + 2ab + 9b^2$ 42. $\left(\frac{2}{7}n - 3m\right)\left(\frac{2}{7}n - 3m\right) \stackrel{?}{=} \frac{4}{49}n^2 - 9m^2$