

Find the product by using the rules for special products.

1. $(c+8)(c-8)$

- [A] $c^2 + 16c - 64$ [B] $c^2 + 8c - 64$ [C] $c^2 - 64$ [D] $c^2 - 16c - 64$

2. $(6f+5)(6f-5)$

- [A] $36f^2 - 60f - 25$ [B] $36f^2 - 25$ [C] $36f^2 + 60f - 25$ [D] $36f^2 + 30f - 25$

3. $(7j+2)(7j-2)$

- [A] $49j^2 + 28j - 4$ [B] $49j^2 - 28j - 4$ [C] $49j^2 - 4$ [D] $49j^2 + 14j - 4$

4. $(4h+3)(4h-3)$

- [A] $16h^2 + 12h - 9$ [B] $16h^2 - 9$ [C] $16h^2 + 24h - 9$ [D] $16h^2 - 24h - 9$

5. $(4x+5)(4x-5)$

- [A] $16x^2 + 40x - 25$ [B] $16x^2 - 40x - 25$ [C] $16x^2 + 20x - 25$ [D] $16x^2 - 25$

6. $(8r+1)(8r-1)$

- [A] $64r^2 - 1$ [B] $64r^2 - 16r - 1$ [C] $64r^2 + 16r - 1$ [D] $64r^2 + 8r - 1$

7. $(7p+9)(7p-9)$

- [A] $49p^2 - 126p - 81$ [B] $49p^2 + 126p - 81$ [C] $49p^2 + 63p - 81$ [D] $49p^2 - 81$

8. $(5n+8)(5n-8)$

- [A] $25n^2 - 80n - 64$ [B] $25n^2 + 40n - 64$ [C] $25n^2 + 80n - 64$ [D] $25n^2 - 64$

9. $(3u+1)(3u-1)$

- [A] $9u^2 - 1$ [B] $9u^2 - 6u - 1$ [C] $9u^2 + 3u - 1$ [D] $9u^2 + 6u - 1$

10. $(9m+7)(9m-7)$

- [A] $81m^2 - 49$ [B] $81m^2 + 126m - 49$
[C] $81m^2 + 63m - 49$ [D] $81m^2 - 126m - 49$

Find the product by using the rules for special products.

11. $(4x+7)^2$

[A] $16x^2+49$ [B] $16x^2+22x+49$ [C] $16x^2+56x+49$ [D] $16x^2+28x+49$

12. $(x-4)^2$ [A] $x^2-4x+16$ [B] $x^2-6x+16$ [C] x^2+16 [D] $x^2-8x+16$

13. $(3x+2)^2$

[A] $9x^2+12x+4$ [B] $9x^2+10x+4$ [C] $9x^2+4$ [D] $9x^2+6x+4$

14. $(2x-3)^2$ [A] $4x^2-6x+9$ [B] $4x^2-12x+9$ [C] $4x^2+9$ [D] $4x^2-2x+9$

15. $(3x-6)^2$

[A] $9x^2-18x+36$ [B] $9x^2-36x+36$ [C] $9x^2+36$ [D] $9x^2-6x+36$

16. $(2x-1)^2$ [A] $4x^2-4x+1$ [B] $4x^2+2x+1$ [C] $4x^2+1$ [D] $4x^2-2x+1$

17. $(5x-3)^2$

[A] $25x^2+9$ [B] $25x^2+4x+9$ [C] $25x^2-30x+9$ [D] $25x^2-15x+9$

18. $(4x-7)^2$

[A] $16x^2+49$ [B] $16x^2-56x+49$ [C] $16x^2-28x+49$ [D] $16x^2-6x+49$

19. $(x-5)^2$ [A] $x^2-8x+25$ [B] $x^2-5x+25$ [C] x^2+25 [D] $x^2-10x+25$

20. $(3f+5)(3f-5)$

21. $(7u+4)(7u-4)$

22. $(x+8)(x-8)$

23. $(2r+3)(2r-3)$

Find the product by using the rules for special products.

24. $(8a + 1)(8a - 1)$

25. $(9y + 7)(9y - 7)$

26. $(5w + 9)(5w - 9)$

27. $(5d + 1)(5d - 1)$

28. $(4s + 3)(4s - 3)$

29. $(8t + 9)(8t - 9)$

30. $(x + 3)^2$

31. $(3x + 2)^2$

32. $(4x + 5)^2$

33. $(5x + 6)^2$

34. $(2x - 1)^2$

35. $(x - 4)^2$

36. $(4x + 3)^2$

37. $(5x + 2)^2$

Find the product by using the rules for special products.

38. $(2x - 5)^2$

39. $(x - 6)^2$

Use the Distributive Property to find each product.

40. $(5x - 4)(2x - 9)$

[A] $10x^2 - 53x - 36$

[B] $10x^2 - 53x + 36$

[C] $10x^2 - 37x + 36$

[D] $10x^2 + 53x + 36$

41. $(2x - 3)(5x + 3)$

[A] $10x^2 - 9x - 9$

[B] $10x^2 - 9x + 9$

[C] $10x^2 + 21x - 9$

[D] $10x^2 + 9x - 9$

42. $(3x - 8)(3x - 2)$

[A] $9x^2 - 30x + 16$

[B] $9x^2 - 30x - 16$

[C] $9x^2 + 18x + 16$

[D] $9x^2 + 30x + 16$

43. $(4x + 7)(4x - 1)$

[A] $16x^2 + 24x - 7$

[B] $16x^2 - 32x - 7$

[C] $16x^2 - 24x - 7$

[D] $16x^2 + 24x + 7$

44. $(3x + 1)(4x - 7)$

[A] $12x^2 + 17x - 7$

[B] $12x^2 - 25x - 7$

[C] $12x^2 - 17x + 7$

[D] $12x^2 - 17x - 7$

45. $(2x + 5)(5x + 4)$

[A] $10x^2 - 17x + 20$

[B] $10x^2 - 33x + 20$

[C] $10x^2 + 33x - 20$

[D] $10x^2 + 33x + 20$

46. $(5x - 2)(3x - 5)$

[A] $15x^2 - 31x - 10$

[B] $15x^2 - 31x + 10$

[C] $15x^2 - 19x + 10$

[D] $15x^2 + 31x + 10$

47. $(2x + 7)(3x - 4)$

[A] $6x^2 + 13x - 28$

[B] $6x^2 - 13x - 28$

[C] $6x^2 - 29x - 28$

[D] $6x^2 + 13x + 28$

Use the Distributive Property to find each product.

48. $(3x-2)(4x+3)$

- [A] $12x^2 + x + 6$ [B] $12x^2 + 17x - 6$ [C] $12x^2 - x - 6$ [D] $12x^2 + x - 6$

49. $(5x-9)(5x+8)$

- [A] $25x^2 - 5x - 72$ [B] $25x^2 - 5x + 72$ [C] $25x^2 + 5x - 72$ [D] $25x^2 + 85x - 72$

50. $(x-3)(x+9)$

- [A] $x^2 + 6x + 27$ [B] $x^2 + 6x - 27$ [C] $x^2 + 12x - 27$ [D] $x^2 - 12x - 27$

51. $(x+2)(x-8)$

- [A] $x^2 - 6x + 16$ [B] $x^2 - 6x - 16$ [C] $x^2 + 10x - 16$ [D] $x^2 - 10x - 16$

52. $(x+1)(x-6)$

- [A] $x^2 - 5x + 6$ [B] $x^2 + 7x - 6$ [C] $x^2 - 5x - 6$ [D] $x^2 - 7x - 6$

53. $(x-5)(x+4)$

- [A] $x^2 - 9x - 20$ [B] $x^2 - x + 20$ [C] $x^2 + 9x - 20$ [D] $x^2 - x - 20$

54. $(x-7)(x+3)$

- [A] $x^2 - 4x + 21$ [B] $x^2 + 10x - 21$ [C] $x^2 - 10x - 21$ [D] $x^2 - 4x - 21$

55. $(x-2)(x+6)$

- [A] $x^2 + 4x + 12$ [B] $x^2 + 4x - 12$ [C] $x^2 - 8x - 12$ [D] $x^2 + 8x - 12$

56. $(x-8)(x+9)$

- [A] $x^2 + 17x - 72$ [B] $x^2 + x + 72$ [C] $x^2 - 17x - 72$ [D] $x^2 + x - 72$

57. $(x+5)(x-1)$

- [A] $x^2 - 6x - 5$ [B] $x^2 + 6x - 5$ [C] $x^2 + 4x + 5$ [D] $x^2 + 4x - 5$

58. $(x-7)(x+4)$

- [A] $x^2 - 11x - 28$ [B] $x^2 - 3x - 28$ [C] $x^2 - 3x + 28$ [D] $x^2 + 11x - 28$

Use the Distributive Property to find each product.

59. $(x-1)(x+5)$

[A] x^2+4x+5

[B] x^2+4x-5

[C] x^2-6x-5

[D] x^2+6x-5

60. $5x(x^3+3)$

61. $6x(x^2+6)$

62. $3x(x^4+4)$

63. $8x(x^3-7)$

64. $7x(x^4+2)$

65. $4x(x^2-5)$

66. $2x(x^2+3)$

67. $5x(x^4+6)$

68. $6x(x^3+4)$

69. $3x(x^2+7)$

Use the FOIL method to find the product.

70. $(2x^2-9)(x^2-7)$

[A] $2x^2-23x^2+63$

[B] $2x^4-23x^2+63$

[C] $2x^2+5x+63$

[D] $2x^4+63x^2-5$

71. $(x^2+3)(x^2-3)$

[A] x^2+6x-9

[B] x^2-9

[C] x^4-9

[D] x^4-9x^2-6

Use the FOIL method to find the product.

72. $(2x^2 - 6)(x^2 + 9)$

[A] $2x^4 - 54x^2 + 24$

[B] $2x^4 + 12x^2 - 54$

[C] $2x^2 + 12x^2 - 54$

[D] $2x^2 - 24x - 54$

73. $(x^2 - 5)(x^2 + 8)$

[A] $x^2 + 3x^2 - 40$

[B] $x^4 - 40x^2 + 13$

[C] $x^4 + 3x^2 - 40$

[D] $x^2 - 13x - 40$

74. $(2x^2 + 8)(x^2 + 4)$

[A] $2x^4 + 32x^2$

[B] $2x^4 + 16x^2 + 32$

[C] $2x^2 + 32$

[D] $2x^2 + 16x^2 + 32$

75. $(x^2 - 7)(x^2 - 5)$

[A] $x^4 + 35x^2 + 2$

[B] $x^2 - 2x + 35$

[C] $x^4 - 12x^2 + 35$

[D] $x^2 - 12x^2 + 35$

76. $(2x^2 - 2)(x^2 - 2)$

[A] $2x^4 - 6x^2 + 4$

[B] $2x^4 + 4x^2 - 2$

[C] $2x^2 + 2x + 4$

[D] $2x^2 - 6x^2 + 4$

77. $(x^2 + 4)(x^2 - 6)$

[A] $x^2 + 10x - 24$

[B] $x^2 - 2x^2 - 24$

[C] $x^4 - 24x^2 - 10$

[D] $x^4 - 2x^2 - 24$

78. $(x^2 + 9)(x^2 + 5)$

[A] $x^2 + 14x^2 + 45$

[B] $x^4 + 45x^2 - 4$

[C] $x^2 + 4x + 45$

[D] $x^4 + 14x^2 + 45$

79. $(2x^2 - 3)(x^2 - 4)$

[A] $2x^2 + 5x + 12$

[B] $2x^4 + 12x^2 - 5$

[C] $2x^2 - 11x^2 + 12$

[D] $2x^4 - 11x^2 + 12$

80. $(5x + 4)(9x + 7)$

81. $(8x - 1)(7x - 1)$

82. $(4x + 9)(8x + 4)$

Use the FOIL method to find the product.

$$83. (7x + 2)(5x + 8)$$

$$84. (5x - 6)(4x - 9)$$

$$85. (6x + 7)(4x + 5)$$

$$86. (9x + 5)(6x + 3)$$

$$87. (7x - 1)(9x - 6)$$

$$88. (9x + 2)(7x + 5)$$

$$89. (5x - 9)(8x - 9)$$

$$90. \left(n + \frac{2}{3}\right)\left(n + \frac{5}{6}\right)$$

$$91. \left(f - \frac{5}{9}\right)\left(f - \frac{1}{3}\right)$$

$$92. \left(k + \frac{2}{9}\right)\left(k - \frac{1}{9}\right)$$

$$93. \left(h + \frac{1}{3}\right)\left(h + \frac{4}{9}\right)$$

$$94. \left(a - \frac{1}{2}\right)\left(a - \frac{2}{9}\right)$$