

Multiplying Special Cases Assignment

Find the product of the following special cases

1. $(x + 3)(x - 3)$

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

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

4. $(6y + 2)^2$

5. $(12x - y)(12x + y)$

6. $(3 + 14y)^2$

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

8. $(x + 9)^2$

9. $(x - 2)^2$

10. $(2x + 3)^2$

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Multiplying Special Cases Assignment

11. $(2a + 3b)^2$

12. $(2a + b)(2a - b)$

13. $(2x - 4y)^2$

14. $(10x - 3y)(10x + 3y)$

15. $(2x + 4y)^2$

16. $(6z - 9)(6z + 9)$

17. $(6xy - 3x)(6xy + 3x)$

18. $(5a - 6)^2$

19. $(4b + 3)(4b - 3)$

20. $(6r + 2p)^2$

Multiplying Special Cases Assignment

Answer:

Find the product of the following special cases

1. $(x + 3)(x - 3)$

Answer:

$$(x)^2 - (3)^2$$
$$x^2 - 9$$

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

Answer:

$$(x)^2 - (5)^2$$
$$x^2 - 25$$

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

Answer:

$$(2x)^2 - (4y)^2$$
$$4x^2 - 16y^2$$

4. $(6y + 2)^2$

Answer:

$$(6y)^2 + 2(6y)(2) + (2)^2$$
$$36y^2 + 24y + 4$$

5. $(12x - y)(12x + y)$

Answer:

$$(12x)^2 - (y)^2$$
$$144x^2 - y^2$$

6. $(3 + 14y)^2$

Answer:

$$(3)^2 + 2(3)(14y) + (14y)^2$$
$$9 + 84y + 196y^2$$

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

Answer:

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

8. $(x + 9)^2$

Answer:

$$(x)^2 + 2(x)(9) + (9)^2$$
$$x^2 + 18x + 81$$

9. $(x - 2)^2$

Answer:

$$(x)^2 - 2(x)(2) + (2)^2$$
$$x^2 - 4x + 4$$

10. $(2x + 3)^2$

Answer:

$$(2x)^2 + 2(2x)(3) + (3)^2$$
$$4x^2 + 12x + 9$$

11. $(2a + 3b)^2$

Answer:

$$(2a)^2 + 2(2a)(3b) + (3b)^2$$
$$4a^2 + 12ab + 9b^2$$

12. $(2a + b)(2a - b)$

Answer:

$$(2a)^2 - (b)^2$$
$$4a^2 - b^2$$

13. $(2x - 4y)^2$

Answer:

$$(2x)^2 - 2(2x)(4y) + (4y)^2$$
$$4x^2 - 16xy + 16y^2$$

14. $(10x - 3y)(10x + 3y)$

Answer:

$$(10x)^2 - (3y)^2$$
$$100x^2 - 9y^2$$

15. $(2x + 4y)^2$

Answer:

16. $(6z - 9)(6z + 9)$

Answer:

Multiplying Special Cases Assignment

$$(2x)^2 + 2(2x)(4y) + (4y)^2$$

$$4x^2 + 16xy + 16y^2$$

$$(6z)^2 - (9)^2$$

$$36z^2 - 81$$

$$17.(6xy - 3x)(6xy + 3x)$$

Answer:

$$(6xy)^2 - (3x)^2$$

$$36x^2y^2 - 9x^2$$

$$18.(5a - 6)^2$$

Answer:

$$(5a)^2 - 2(5a)(6) + (6)^2$$

$$25a^2 - 60a + 36$$

$$19.(4b + 3)(4b - 3)$$

Answer:

$$(4b)^2 - (3)^2$$

$$16b^2 - 9$$

$$20.(6r + 2p)^2$$

$$(6r)^2 + 2(6r)(2p) + (2p)^2$$

$$36r^2 + 24rp + 4p^2$$