

Multiplying Special Case Polynomials

Find each product.

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

$x^2 - 25$

2) $(n - 1)(n + 1)$

$n^2 - 1$

3) $(p - 1)^2$

$p^2 - 2p + 1$

4) $(x - 3)(x + 3)$

$x^2 - 9$

5) $(x - 4)^2$

$x^2 - 8x + 16$

6) $(n + 3)^2$

$n^2 + 6n + 9$

7) $(x - 5)(x + 5)$

$x^2 - 25$

8) $(n - 5)^2$

$n^2 - 10n + 25$

9) $(2k^2 + 1)^2$

$4k^4 + 4k^2 + 1$

10) $(8a^2 + 4)(8a^2 - 4)$

$64a^4 - 16$

11) $(2 + 5n^2)^2$

$4 + 20n^2 + 25n^4$

12) $(3x - 7)(3x + 7)$

$9x^2 - 49$

$$13) (3 + 7v^2)(3 - 7v^2)$$
$$9 - 49v^4$$

$$14) (7v^2 - 6)(7v^2 + 6)$$
$$49v^4 - 36$$

$$15) (2 + v)^2$$
$$4 + 4v + v^2$$

$$16) (6v + 3)(6v - 3)$$
$$36v^2 - 9$$

$$17) (8a^2 - 2)(8a^2 + 2)$$
$$64a^4 - 4$$

$$18) (4a + 7)^2$$
$$16a^2 + 56a + 49$$

$$19) (2n - 7)^2$$
$$4n^2 - 28n + 49$$

$$20) (-m + 5n)(-m - 5n)$$
$$m^2 - 25n^2$$

$$21) (7u + 4v)(7u - 4v)$$
$$49u^2 - 16v^2$$

$$22) (-y - 3x)(-y + 3x)$$
$$y^2 - 9x^2$$

$$23) (-9x^2 - 10y)^2$$
$$81x^4 + 180x^2y + 100y^2$$

$$24) (4u + 9v)^2$$
$$16u^2 + 72uv + 81v^2$$

$$25) (7u + 6v)(7u - 6v)$$
$$49u^2 - 36v^2$$

$$26) (-6x - 7y^2)^2$$
$$36x^2 + 84xy^2 + 49y^4$$