

**Multiplying Special Case Polynomials**

Date\_\_\_\_\_ Period\_\_\_\_

**Find each product.**

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

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

3)  $(p - 1)^2$

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

5)  $(x - 4)^2$

6)  $(n + 3)^2$

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

8)  $(n - 5)^2$

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

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

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

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

$$13) (3 + 7v^2)(3 - 7v^2)$$

$$14) (7v^2 - 6)(7v^2 + 6)$$

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

$$16) (6v + 3)(6v - 3)$$

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

$$18) (4a + 7)^2$$

$$19) (2n - 7)^2$$

$$20) (-m + 5n)(-m - 5n)$$

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

$$22) (-y - 3x)(-y + 3x)$$

$$23) (-9x^2 - 10y)^2$$

$$24) (4u + 9v)^2$$

$$25) (7u + 6v)(7u - 6v)$$

$$26) (-6x - 7y^2)^2$$

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

$9x^2 - 49$

$$13) (3 + 7v^2)(3 - 7v^2)$$

$$\color{red}9 - 49v^4$$

$$14) (7v^2 - 6)(7v^2 + 6)$$

$$\color{red}49v^4 - 36$$

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

$$\color{red}4 + 4v + v^2$$

$$16) (6v + 3)(6v - 3)$$

$$\color{red}36v^2 - 9$$

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

$$\color{red}64a^4 - 4$$

$$18) (4a + 7)^2$$

$$\color{red}16a^2 + 56a + 49$$

$$19) (2n - 7)^2$$

$$\color{red}4n^2 - 28n + 49$$

$$20) (-m + 5n)(-m - 5n)$$

$$\color{red}m^2 - 25n^2$$

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

$$\color{red}49u^2 - 16v^2$$

$$22) (-y - 3x)(-y + 3x)$$

$$\color{red}y^2 - 9x^2$$

$$23) (-9x^2 - 10y)^2$$

$$\color{red}81x^4 + 180x^2y + 100y^2$$

$$24) (4u + 9v)^2$$

$$\color{red}16u^2 + 72uv + 81v^2$$

$$25) (7u + 6v)(7u - 6v)$$

$$\color{red}49u^2 - 36v^2$$

$$26) (-6x - 7y^2)^2$$

$$\color{red}36x^2 + 84xy^2 + 49y^4$$