

## Difference &amp; Sum of Squares

Name each polynomial by degree and number of terms.

1)  $-4$

Constant Monomial

2)  $-2 + 3p - 3p^3 + 9p^6 - 7p^4 - 2p^2$

Sextic Polynomial

3)  $-10a^3 - 3a + 8a^5$

Quintic Trinomial

4)  $4x^5 - 3x - 9x^2 + 9x^4$

Quintic Polynomial

5)  $-7$

Constant Monomial

6)  $-8p - 6p^4 + 4p^6$

Sextic Trinomial

7)  $-2x + 8$

Linear Binomial

8)  $-7 - 5x + 6x^3$

Cubic Trinomial

Find each product. Look for a pattern.

9)  $(6a - 1)(6a + 1)$

$36a^2 - 1$

10)  $(6n - 2)(6n + 2)$

$36n^2 - 4$

11)  $(3x - 8)(3x + 8)$

$9x^2 - 64$

12)  $(3m + 4)(3m - 4)$

$9m^2 - 16$

13)  $(n - 4)(n + 4)$

$n^2 - 16$

14)  $(2x - 3)(2x + 3)$

$4x^2 - 9$

$$15) (3x+6)(3x-6)$$

$$9x^2 - 36$$

$$16) (7+8k)(7-8k)$$

$$49 - 64k^2$$

$$17) (x+3)(x+3)$$

$$x^2 + 6x + 9$$

$$18) (x-5)(x-5)$$

$$x^2 - 10x + 25$$

$$19) (x+2)(x+2)$$

$$x^2 + 4x + 4$$

$$20) (x-4)(x-4)$$

$$x^2 - 8x + 16$$

$$21) (x-7)(x-7)$$

$$x^2 - 14x + 49$$

$$22) (2x+7)(2x+7)$$

$$4x^2 + 28x + 49$$

$$23) (4v+5)^2$$

$$16v^2 + 40v + 25$$

$$24) (x-8)^2$$

$$x^2 - 16x + 64$$

$$25) (3n+6)^2$$

$$9n^2 + 36n + 36$$

$$26) (4v-6)^2$$

$$16v^2 - 48v + 36$$