

Multiplying Polynomials

Find each product.

1) $6v(2v + 3)$

$$12v^2 + 18v$$

2) $7(-5v - 8)$

$$-35v - 56$$

3) $2x(-2x - 3)$

$$-4x^2 - 6x$$

4) $-4(v + 1)$

$$-4v - 4$$

5) $(2n + 2)(6n + 1)$

$$12n^2 + 14n + 2$$

6) $(4n + 1)(2n + 6)$

$$8n^2 + 26n + 6$$

7) $(x - 3)(6x - 2)$

$$6x^2 - 20x + 6$$

8) $(8p - 2)(6p + 2)$

$$48p^2 + 4p - 4$$

9) $(6p + 8)(5p - 8)$

$$30p^2 - 8p - 64$$

10) $(3m - 1)(8m + 7)$

$$24m^2 + 13m - 7$$

11) $(2a - 1)(8a - 5)$

$$16a^2 - 18a + 5$$

12) $(5n + 6)(5n - 5)$

$$25n^2 + 5n - 30$$

$$13) (4p - 1)^2$$
$$16p^2 - 8p + 1$$

$$14) (7x - 6)(5x + 6)$$
$$35x^2 + 12x - 36$$

$$15) (6n + 3)(6n - 4)$$
$$36n^2 - 6n - 12$$

$$16) (8n + 1)(6n - 3)$$
$$48n^2 - 18n - 3$$

$$17) (6k + 5)(5k + 5)$$
$$30k^2 + 55k + 25$$

$$18) (3x - 4)(4x + 3)$$
$$12x^2 - 7x - 12$$

$$19) (4a + 2)(6a^2 - a + 2)$$
$$24a^3 + 8a^2 + 6a + 4$$

$$20) (7k - 3)(k^2 - 2k + 7)$$
$$7k^3 - 17k^2 + 55k - 21$$

$$21) (7r^2 - 6r - 6)(2r - 4)$$
$$14r^3 - 40r^2 + 12r + 24$$

$$22) (n^2 + 6n - 4)(2n - 4)$$
$$2n^3 + 8n^2 - 32n + 16$$

$$23) (6n^2 - 6n - 5)(7n^2 + 6n - 5)$$
$$42n^4 - 6n^3 - 101n^2 + 25$$

$$24) (m^2 - 7m - 6)(7m^2 - 3m - 7)$$
$$7m^4 - 52m^3 - 28m^2 + 67m + 42$$