

Name : key

Score : _____

Teacher : _____

Date : _____

Multiplying Monomials and Polynomials

Find the product of each expression.

$$1) (y-6)^2 = (y-6)(y-6)$$
$$\underline{y^2 - 12y + 36}$$

$$6) (b+5)^2 = (b+5)(b+5)$$
$$\underline{b^2 + 10b + 25}$$

$$2) (b+9)(b-9)$$
$$\underline{b^2 - 81}$$

$$7) (6n+7)^2 = (6n+7)(6n+7)$$
$$\underline{36n^2 + 84n + 49}$$

$$3) (n+7)^2 = (n+7)(n+7)$$
$$\underline{n^2 + 14n + 49}$$

$$8) (8z+3)(8z-3)$$
$$\underline{64z^2 - 9}$$

$$4) (z+6)(z-6)$$
$$\underline{z^2 - 36}$$

$$9) (9p-3)^2 = (9p-3)(9p-3)$$
$$\underline{81p^2 - 54p + 9}$$

$$5) (9c+8)(9c-8)$$
$$\underline{81c^2 - 64}$$

$$10) (8x-2)^2 = (8x-2)(8x-2)$$
$$\underline{64x^2 - 32x + 4}$$



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) $(5n + 6)(5n - 5)$
 $25n^2 + 5n - 30$

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

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

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

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

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

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

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

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

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

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

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

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