

Multiply each expression.

$$1) 2^3 \cdot 2^5 = (2 \cdot 2 \cdot 2)(2 \cdot 2 \cdot 2 \cdot 2 \cdot 2) = 2^8 = 256$$

$$2) x^7 \cdot x^{15} = x^{7+15} = x^{22}$$

When we **Multiply Powers** with the same base, then we **add their exponents**.

Multiply each expression.

3) $y^4 \cdot y^6$

4) $m^9 \cdot m^8 \cdot m^3$

5) $-4x^3 \cdot 8x^5$

6) $(-3a^4)(-4a^5)$

7) $-2mp^5 \cdot 3m^4 p$

8) $(-4wx^3)(6w^3x^2)$

9) $(3rv)(-4r^3v^2)(2r^2v^4)$

10) $(\frac{3}{4}x^2y)(-36xy^4)$

Multiply each expression.

11) $7(3x + 5)$

12) $-5x(2x^2 - 7x + 9)$

13) $-8n^3(n^4 - 4n^2 + n)$

14) $2a^3b^2(3a^2b^4 - 4ab^5)$

Multiply each expression.

$$15) 8x(2x^2 - 5x + 7) - 3x(4x^2 + 3x - 8)$$

$$16) 4x(x + 7) + 5x(2x^2 - 4x + 1)$$

$$17) -5y(3y^2 - 5y + 8) - 6y(y^2 - 4y - 5)$$