**MUST have**

Like terms

**Add the**

Coefficients

**Keep the**

Variable term

**Multiply the**

For each variable, keep the base and add the exponents.

**Examples**

\[
5x + 2x = 7x
\]

\[-3x + 4x = x \text{ (or } 1x)\]

\[3x^2 + 4x + 6x^2 + x = 9x^2 + 5x\]

\[2x \cdot 4x = 8x^2\]

\[8x \cdot 3x \cdot 2xy = 48x^3y\]

\[(5x^2y)^2 = 25x^4y^2\]

**Examples**

\[10x - 15x = -5x\]

\[12x^2 - 4x^2 - x^2 = 7x^2\]

\[14x - 2y - 8x - 5y = 6x - 7y\]

\[60x^{10} \div 15x^2 = 4x^8\]

\[30x^3y^2 = 3xy^2\]

\[10x^2\]

\[6x^5 \cdot 4x^3 = 12x^6\]

**Divide the**

For each variable, keep the base and subtract the exponents.

**Examples**

\[60x^{10} \div 15x^2 = 4x^8\]

\[30x^3y^2 = 3xy^2\]

\[10x^2\]

\[6x^5 \cdot 4x^3 = 12x^6\]
Operations with Monomials

Subtract Monomials

Add Monomials

Divide Monomials

Multiply Monomials

\[-\]

\[+\]

\[\div\]

\[\cdot\]