

Examples: $3a^2 * 5ab^3c$ means

$$3 * 5 \text{ and } a^2 * a^1b^3c$$

Add exponents of the same letter when multiplying.

$$15 a^3 b^3c$$

$2a^2 * 3a^1b^2$ means

$$2 * 3 * a^2 * ab^2$$

$$6 a^3 b^2$$

$$\begin{array}{l} 5(3x + 7) \\ \text{↪} \quad \downarrow \\ 5 \cdot 3x + 5 \cdot 7 \\ 15x + 35 \end{array}$$

$$\begin{array}{l} 2(6a + 3b) \\ \text{↪} \quad \downarrow \quad \text{↪} \\ 2 \cdot 6a + 2 \cdot 3b \\ 12a + 6b \end{array}$$

$$\begin{array}{l} 4(9x + 8y) \\ \text{↪} \quad \text{↪} \\ 4 \cdot 9x + 4 \cdot 8y \\ 36x + 32y \end{array}$$

$$12b + 6b^2$$