

Operations with ExponentsExponent RulesNotes

$$2x^5 + 7x^5 =$$

Adding,

We covered this in *Combining Like Terms*. You must have **like terms (same variable & exponent)** to add or subtract, for example, you cannot add

$$2x^5 + 7x^3 =$$

$$2x^5 \cdot 7x^3 =$$

Multiplying,

Long Way:

$$2x^5 \cdot 7x^3 = 2xxxxx \cdot 7xxx =$$

$$(2x^5)^3 =$$

Raising to Power,

Long Way:

$$(2x^5)^3 = (2x^5)(2x^5)(2x^5) =$$

$$\frac{24x^5}{6x^3} =$$

Dividing,

We covered this in *Fractions- Simplify*

Long Way:

$$\frac{24x^5}{6x^3} = \frac{24xxxxx}{6xxx} =$$

$$\frac{24x^3}{6x^5} =$$

$$\frac{24x^3}{6x^5} = \frac{24xxx}{6xxxxx} =$$