

# M8 6.4 The Distributive Property

## Review Algebra - "Solving for X"

- ✓ 1) circle the terms
- ✓ 2) start +/- terms (near x); do opposite
- 3) next +/- terms (w/ x-term); do opposite
- 4) Check your Answer!!! (replace variable w/ answer check 4 true statement)

Ex

$$\left( \frac{x}{6} + 5 \right) = 12$$

~~-5~~      ~~-5~~

$$\frac{(42)}{6} + 5 = 12$$

$$7 + 5 = 12$$

$$\boxed{12 = 12} \checkmark$$
  

$$6 \cdot \frac{x}{6} = 7 \cdot 6$$

$$\boxed{x = 42}$$

## New Distributive Property! Super Important ^.^

$$3 \times 6 \rightarrow 3(4+2) \quad (3 \cdot 4) + (3 \cdot 2) = 18$$

12 + 6

pdf

$$3 \begin{array}{|c|c|c|c|c|c|} \hline & & 4 & & & 2 \\ \hline & & 12 & & & 6 \\ \hline & & & & & \\ \hline & & & & & \\ \hline & & & & & \\ \hline & & & & & \\ \hline \end{array} = 18$$

Ex 1  $7 \times 15 \rightarrow 7 \begin{array}{|c|c|} \hline 10 & 5 \\ \hline 70 & 35 \\ \hline \end{array} = \boxed{105}$

Ex 2  $20(b+c)$

$$20b + 20c$$

$$20 \begin{array}{|c|c|} \hline b & +c \\ \hline 20b & +20c \\ \hline \end{array} = \boxed{20b + 20c}$$

\* multiply everything on the outside of the brackets by everything on the inside of the brackets \*