

SOLVING EQUATIONS (DISTRIBUTIVE PROPERTY)

EXAMPLE 1

$$3(2x - 5) = 21$$

$$\begin{array}{r} 6x - 15 = 21 \\ +15 \quad +15 \\ \hline \end{array}$$

$$\begin{array}{r} 6x = 36 \\ 6 \quad 6 \end{array}$$

$$x = 6$$

★ FIRST STEP IS TO DISTRIBUTE (MULTIPLY) THE COEFFICIENT OF 3 TO EVERY TERM INSIDE THE PARENTHESIS

→ NOW WE CAN SOLVE LIKE NORMAL! (ADD 15 THEN DIVIDE BY 6)

EXAMPLE 2

$$-16 = -2(5 - x)$$

$$\begin{array}{r} -16 = -10 + 2x \\ +10 \quad +10 \\ \hline \end{array}$$

$$\begin{array}{r} -6 = 2x \\ 2 \quad 2 \end{array}$$

$$-3 = x$$

NEGATIVE TIMES NEGATIVE IS A POSITIVE!

BE CAREFUL WHEN MULTIPLYING NEGATIVES!

→ NOW SOLVE!