

Warm-up:

Solve for x in the following equations

PEMDAS

1. The opposite of multiplication is:

Circle one: \times $+$ $-$ \div

2. $x + 3 = -7$
 $+3 \quad +3$
 $x = -4$

$$\begin{aligned} -4 + 3 &= -7 \\ -1 &= -7 \end{aligned}$$

$$\begin{aligned} 5 \cdot 3 &= 15 \\ 15 &= 15 \end{aligned}$$

3. $5x = 15$
 $\div 5 \quad \div 5$
 $x = 3$

$$\begin{aligned} 4 &= -1 + 5 \\ 4 &= 4 \end{aligned}$$

4. $4 = x + 5$
 $-5 \quad -5$
 $-1 = x$

SWBAT solve two step equations and multi step equations with variables on ONE side.

Agenda:

Warm - Up

Review two step

Go over combining like terms

Exit Card

Simplify:

$$\begin{aligned} 4 + (3)(4) - 7 \\ 4 + 12 - 7 \\ 16 - 7 \\ 9 \end{aligned}$$

$$\begin{aligned} (2 - 8)^2 + 8 \\ (-6)^2 + 8 \\ 36 + 8 \\ 44 \end{aligned}$$

How do you peel an onion? 

How do you get bare feet?

Example

Solve:

$$\begin{array}{r} 3x + 6 = 18 \\ -6 \quad -6 \\ \hline 3x = 12 \\ \div 3 \quad \div 3 \\ \hline x = 4 \end{array}$$

$$\begin{array}{r} -8 + \frac{x}{5} = 12 \\ +8 \quad +8 \\ \hline \frac{x}{5} = 20.5 \\ \times 5 \quad \times 5 \\ \hline x = 100 \end{array}$$

Example

Solve:

$$\begin{array}{r} 5x - 12 + 2x = 37 \\ 7x - 12 = 37 \\ +12 \quad +12 \\ \hline 7x = 49 \\ \div 7 \quad \div 7 \\ \hline x = 7 \end{array}$$

$$\begin{array}{r} 30 = 12 - 5x + 3x \\ 30 = 12 - 2x \\ -12 \quad -12 \\ \hline 18 = -2x \\ \div -2 \quad \div -2 \\ \hline -9 = x \\ x = -9 \end{array}$$

Example

Solve:

$$\begin{aligned} 4(2x - 6) &= 32 \\ 8x - 24 &= 32 \\ \underline{+24 \quad +24} & \\ 8x &= 56 \\ \underline{8 \quad 8} & \\ x &= 7 \end{aligned}$$

$$\begin{aligned} 3 - (5x + 4) &= 14 \\ 3 - 5x - 4 &= 14 \\ \underline{-1 - 5x} &= 14 \\ \underline{+1 \quad +1} & \\ -5x &= 15 \\ \underline{-5 \quad -5} & \\ x &= -3 \end{aligned}$$

Exit Card

Solve:

$$9x + 13 - 5x = -7$$