1.2

SOLVE MULTI-STEP EQUATIONS

DO NOW

Solve the equation.

1) $\frac{x}{3} = 12$

2) $x - (-3) = -9$

Solving Two-Step Equations

- Solve by using the INVERSE operation to undo operations
- Undo two-step equations by doing PEMDAS backwards!!

Examples

$a)\ 2x-15=15$

$b)\ 837=\frac{p}{2}+37$

Examples

$c)\ -5.2 = -0.2 - k$

$d)\ -7 = 9 - 4m$

Practice

1) $-3x+(-x)=48$

2) $\frac{1}{4}y+5=3$

Practice

3) $-0.07 = \frac{k}{8} + 0.1$

4) $\frac{1}{4}y + 5 = 3$

Solving Multi-Step Equations

- **Distribute if possible**
- **Simplify**
- **Solve**

Examples

$$a)\quad 9a - a - 7 = 13$$

Solving Multi-Step Equations

- **Distribute if possible**
- **Simplify**
- **Solve**

Examples

$b)\quad 35 = -5 + 2x - 7x$

Solving Multi-Step Equations

- Distribute if possible
- Simplify
- Solve

Examples

$c)\ \ 4z+7(z-2)=41$

Solving Multi-Step Equations

- **Distribute if possible**
- **Simplify**
- **Solve**

Examples

$$d)\ -3(k+1)+4(k-2)=15$$

The height (in feet) of a tree after x years is $1.5x + 15$. After how many years is the tree 24 feet tall?

Use the table to find the number of miles x you need to run on Friday so that the mean number of miles run per day is 1.5.

Day	Miles
Monday	2
Tuesday	0
Wednesday	1.5
Thursday	0
Friday	x