

## Stick Quiz

Translate the sentences into equations.

1. *Half a number minus ten equals the number.*
2. *The sum of  $c$  and twice  $d$  is the same as 20.*
3. Translate the equation,  $10(a - b) = b + 3$ , into a verbal sentence
4. *The area of a triangle is  $1/2$  times the base times the height. Write a formula.*



I can... solve Multi-Step Equations.

\*\*Will answer questions about the front load  
after the lesson\*\*

## Remember Number Properties

Give me a list of all properties we discussed last chapter.

addition inverse	}	reflexive
Mult inverse		symmetric
additive identity		zero prop
distributive		transitive
substitution		mult identity
commutative • +		
associative • +		

ON BOTH SIDES—

Additive Prop of Equality		Add prop =
Subtraction " " "		
Mult " " "		$2 \cdot 3 = 3 \cdot 2$
DIVISION " " "		$6 = 3 \cdot 2$

  

$5 = 5$	$5 = 5$	$2 \cdot 5 = 5 \cdot 2$
$+3 \quad +3$	$-2 \quad -2$	$10 = 10$
$8 = 8$	$3 = 3$	

1. Solve and list property for every step.

$$\begin{array}{r}
 h - 12 = -27 \\
 +12 \quad +12 \\
 \hline
 h = -15 \checkmark \\
 \text{Substitute} \\
 -15 - 12 \stackrel{?}{=} -27 \\
 -27 = -27
 \end{array}$$

SADMERP  
 Add prop =  
 (Add inverse)

- Watch  
 Only!!
1. Draw river
  2. start on variable side
  3. + -
  4. • ÷
  5. substitute / check

2. Solve and list property for every step.

$$90 + x = 37$$

\_\_\_\_\_

\_\_\_\_\_

Substitute

3. Solve and list property for every step.

$$-75 = -15b$$

Substitute

4. Solve

$$\cancel{3} \cdot \frac{x}{\cancel{3}} = 4 \cdot 3$$
$$x = 12$$

Mult Inverse  
Mult Prop =

Substitute



2. Solve and list property for every step.

$$6v + 7 = -5$$

Substitute

3. Solve and list property for every step.

SADMERP

$$\begin{array}{l} \cancel{12} \cdot \frac{(k+9)}{\cancel{12}} = -2 \cdot 12 \\ k+9 = -24 \\ \quad -9 \quad \quad -9 \\ \hline k = -33 \checkmark \end{array}$$

Substitute

Mult Inverse  
Mult Prop =  
add inverse  
Subt. prop =

$$\frac{-33+9}{12} \stackrel{?}{=} -2$$

$$-2 = -2 \checkmark$$

Solve and list property for every step.

4.  $\frac{-4j + (+4)}{-6} = 12$

5.  $\frac{4}{5}m + 2 = 6$

-2     -2

~~5~~  $\cdot \frac{1}{5}m = \frac{4}{5} \cdot 5$

~~4~~  $\cdot \frac{1}{5}m = 4$

$m = 5$

Find three consecutive even integers whose sum is 84.

$X$  is the 1st even #

$X+2$

$X+4$

$$X + X + 2 + X + 4 = 84$$

$$3X + 6 = 84$$

$$\begin{array}{r} -6 \\ 3X + 6 = 84 \\ -6 \quad -6 \\ \hline 3X = 78 \end{array}$$



# Homework

2.2 Pg. 86 #18-41o, 42, 43

2.3 Pg. 94 #11-21o, 24-29, 41