

Stick Quiz

Solve each equation. Name the properties.

1. $-6m - 12 = 24$
 $+12 \quad +12$
add Inv.

$-6m = 36$

$m = -6$

2. $\frac{2b}{3} + 6 = 24$
 $-6 \quad -6$

Mult Inv.

~~$3 \cdot \frac{2b}{3} = 18 \cdot 3$~~

$\frac{2b}{2} = \frac{54}{2}$

add Inv. mult Inv

3. $\frac{2b-6}{3} = 8$

$b = 15$

*Mult Inv
Add Inv.
Mult Inv.*

4. Write an equation and solve: $b = 27$

Half a number minus ten equals ~~is~~ thirty.

$\frac{x}{2} - 10 = 30$
 $+10 \quad +10$

$\frac{1}{2}x - 10 = 30$

$2 \cdot \frac{x}{2} = 40 \cdot 2$

$x = 80$

Solving equations

2.3

Goal: Get variable alone. $1x=5$ the x is alone.

Alone $x = -10$

Not Alone

$x = 8$

$\frac{1}{2}x = 4$

$x - 5 = 10$

$-x = 10$

$|x = -5$

$\frac{-1x}{-1} = \frac{10}{-1}$

if possible +/- inverse

SADMERP
VERIFY

Then :/:

SADMERP

$$\frac{2b}{3} + 6 = 24$$

-6 -6 add inv.

$$\frac{3}{2} \cdot \frac{2b}{3} = \frac{18}{1} \cdot \frac{3}{2}$$

$$\frac{6b}{6} = \frac{54}{2}$$

$b = 9$ $\frac{2(9) + 6 = 24}{3}$

↑

SADMERP $\frac{2(15) - 6 = 9}{3}$

$$1 \cancel{3} \cdot \frac{(2b - 6)}{\cancel{3}} = 8 \cdot 3$$

Mult inv.

$$2b - 6 = 24$$

+6 +6 add inv.

$$\frac{2b}{2} = \frac{30}{2}$$

Mult inv.

$$b = 15$$

Vocabulary:

Integer: all positive and negative whole numbers. (No fractions)

Odd: a number that can not divide by 2.

Even: a number that will divide by 2.

Consecutive: numbers in a row. 1,2,3

6,8,10 or 11,13,15

Find three consecutive even integers whose sum is 12.

$$\text{even} + \text{even} + \text{even} = 12$$

If we say the
1st even is x.

$$x + (\quad) + (\quad) = 12$$



Find three consecutive odd integers whose sum is 57

$$\text{odd} + \text{odd} + \text{odd} = 57$$

If we say the
1st odd is x.

$$x + \overbrace{(x + 2)}^{\text{2nd odd number}} + \overbrace{(x + 4)}^{\text{3rd odd number}} = 57$$

$$x + x + 2 + x + 4 = 57$$

$$3x + 6 = 57$$

Find 3 consecutive integers whose sum is -33.

- 1. Find three consecutive even integers whose sum is 84.*
- 2. Find three consecutive numbers that whose sum is 72.*
- 3. Find three consecutive even numbers whose sum is 1020.*

Homework: Finish!

2.2 Pg. 86 ~~#42~~, 43, 45-63o

2.3 Pg. 94 #11-21o, 26-29, 41

New: Pg 94 #23-29, 40