Warm Up-

1. $r + 3 = 10$

$-3 \quad -3$

$r = 7$

2. $x - 6 = 4$

$+6 \quad +6$

$x = 10$

3. $-4 + y = 1$

$+4 \quad +4$

$y = +5$

4. $5 + x = -2$

$-5 \quad -5$

$x = -7$


Solving Equations using
Multiplication and Division

Last class we talked about inverse operations or operations that undo each other. Write down the inverse operations for:

Addition Subtraction

Subtraction Addition

Multiplication Division

Division multiplication

Now that you remember inverse operations,

try to solve the following:

Ex 1: $2x = 6$

$\frac{2x}{2} = \frac{6}{2}$

$x = 3$

Ex 2: $6x = 18$

$\frac{6x}{6} = \frac{18}{6}$

$x = 3$

Ex 3: $3x = 21$

$\frac{3x}{3} = \frac{21}{3}$

$x = 7$

Can we solve equations with Negative Numbers?

Ex 1: $-3x = 6$

$\frac{-3x}{-3} = \frac{6}{-3}$

$x = -2$

Ex 2: $4x = -12$

$\frac{4x}{4} = \frac{-12}{4}$

$x = -3$

Ex 3: $-3x = 9$

$\frac{-3x}{-3} = \frac{9}{-3}$

$x = -3$

Division?

Ex 1:

$$2 \cdot \frac{x}{2} = 6 \cdot 2$$

$x = 12$

Ex 2:

$$5 \cdot \frac{x}{5} = 4 \cdot 5$$

$x = 20$

Ex 3:

$$4 \cdot \frac{x}{4} = 9 \cdot 4$$

$x = 36$

Division? And Negative Numbers?

Ex 1:

$$\frac{x}{-2} = 8$$

Ex 2:

$$\frac{x}{3} = -4$$

Ex 3:

$$\frac{x}{-4} = 6$$