

Test Friday

Warm Up

Solve for the indicated variable in the parenthesis. Show all of your work!

1. $P = Irt$ (r)

$$\overline{I + I +}$$

$$\frac{P}{I +} = r$$

4. $A = \pi r^2$ (r)

$$\frac{A}{\pi} = r^2$$

$$\sqrt{\frac{A}{\pi}} = r$$

$$\sqrt{\frac{A}{\pi}} = r$$

2. $2y = 8x - 4$ (x)

$$\frac{2y}{8} = \frac{8x - 4}{8}$$

$$\frac{2y}{8} = x - \frac{4}{8}$$

$$x = \frac{2y}{8} + \frac{4}{8}$$

$$\frac{V}{\pi h} = r^2$$

$$\frac{V}{\pi h} = r^2$$

$$\sqrt{\frac{V}{\pi h}} = r$$

3. $P = 2(L + W)$ (L)

$$P = 2L + 2W$$

$$-2W$$

$$-2W + P = 2L$$

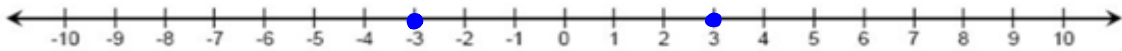
$$\frac{-2W + P}{2} = \frac{2L}{2}$$

6. $R = \frac{E}{I}$ (E)

$$\frac{R}{I} = \frac{E}{I}$$

$$E = IR$$

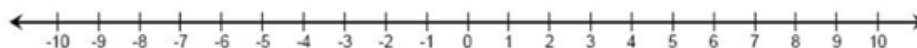
Absolute Value Equations



The absolute value is the distance a number is from zero
 Distance is ALWAYS Positive regardless of direction.
 Extraneous solutions are solutions that don't check and they must be discarded.

	I DO	WE DO	YOU DO
1.	$ 2x + 3 = 15$ $2x + 3 = 15$ $-3 -3$ $2x = 12$ $\frac{2x}{2} = \frac{12}{2}$ $x = 6$ $2x + 3 = -15$ $-3 -3$ $2x = -18$ $\frac{2x}{2} = \frac{-18}{2}$ $x = -9$	$ 4x - 1 = 11$ $4x - 1 = 11$ $+1 +1$ $4x = 12$ $\frac{4x}{4} = \frac{12}{4}$ $x = 3$ $4x - 1 = -11$ $+1 +1$ $4x = -10$ $x = \frac{-10}{4} = -\frac{5}{2}$	$ 2x + 7 = 21$ $x = 7$ $x = -14$
2.	$4 x - 9 - 1 = 35$ $+1 +1$ $4 x - 9 = 36$ $\frac{4 x - 9 }{4} = \frac{36}{4}$ $ x - 9 = 9$ $x - 9 = 9$ $+9 +9$ $x = 18$ $x - 9 = -9$ $+9 +9$ $x = 0$	$-2 x + 5 - 2 = -32$ $+2 +2$ $-2 x + 5 = -30$ $\frac{-2 x + 5 }{-2} = \frac{-30}{-2}$ $ x + 5 = 15$ $x + 5 = 15$ $x = 10$ $x + 5 = -15$ $-5 -5$ $x = -20$	$8 x + 4 + 2 = 26$ $x = -7$ $x = -1$
3.	$ x + 5 = 3x - 7$ $x + 5 = 3x - 7$ $-x -x$ $5 = 2x - 7$ $+7 +7$ $12 = 2x$ $\frac{12}{2} = \frac{2x}{2}$ $6 = x$	$ 2x - 3 = 3x - 2$ $x + 5 = -3x + 7$ $+3x +3x$ $4x + 5 = 7$ $-5 -5$ $4x = 2$ $\frac{4x}{4} = \frac{2}{4}$ $x = \frac{1}{2}$	$4 x + 4 + 2 = 26$

Absolute Value Inequalities



- \geq Greater Than is an _____ statement
- $>$ Greater Than is an _____ statement
- \leq Less Than is an _____ statement
- $<$ Less Than is an _____ statement

	I DO	WE DO	YOU DO
4.	Solve and graph $ 2x + 3 > 11$	Solve and graph $ 5x - 3 > 27$	Solve and graph $ 4x + 1 > 9$
5.	Solve and graph $ 10x - 8x + 3 \leq 19$	Solve and graph $ 3x + 2x - 10 < 20$	Solve and graph $ 4x + 3x \leq 21$
6.	Solve and graph $6 x + 3 \geq 18$	Solve and graph $4 x - 5 \leq 40$	Solve and graph $2 x + 7 \geq 22$