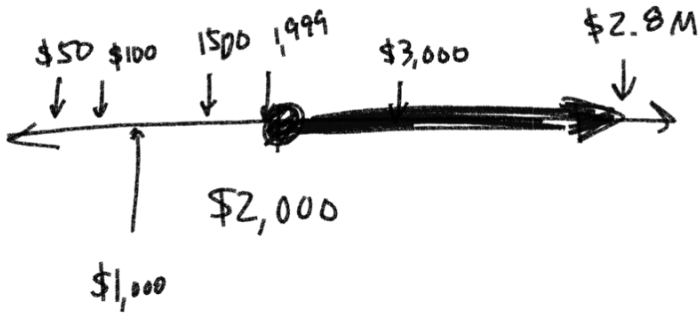


W-A1 Algebra 1

Week 13

$x \geq \$2,000$

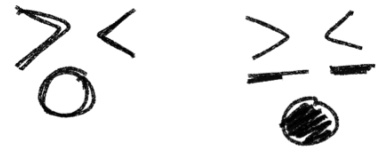
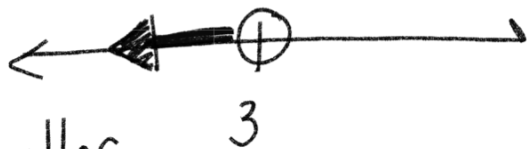


>
Greater
than

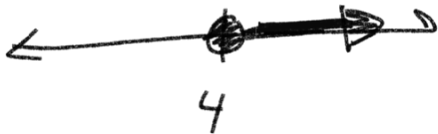
<
Less
than



smaller
 $x < 3$



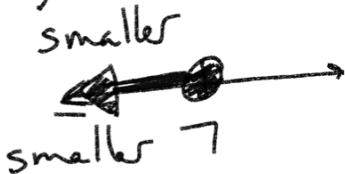
$x \geq 4$



5 < x
flip
right
BIGGER



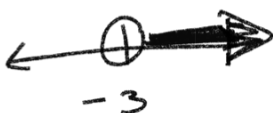
1.) $x \leq 7$



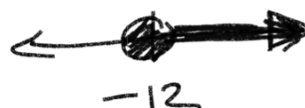
2.) $8 > x$



3.) $x > -3$



4.) $-12 \leq x$



$$x + 3 = 8$$

$$\begin{array}{r} -3 \quad -3 \\ \hline \end{array}$$

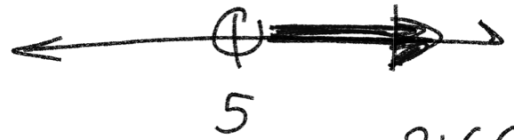
$$x = 5$$

$$x + 3 > 8$$

$$\begin{array}{r} -3 \quad -3 \\ \hline \end{array}$$

BIGGER

$$x > 5$$



BIGGER

$$12 \leq x - 4$$

$$\begin{array}{r} +4 \quad +4 \\ \hline \end{array}$$

$$16 \leq x$$



$$12 = x - 4$$

$$\begin{array}{r} +4 \quad +4 \\ \hline \end{array}$$

$$16 = x$$

$$3\left(\frac{x}{3}\right) < (4)^3$$

$$x < 12$$

smaller

$$3\left(\frac{x}{3}\right) = (4)^3$$

$$x = 12$$



smaller 12

$$-5x \geq 35$$

$$\begin{array}{r} \underline{-5} \quad \underline{-5} \\ \hline \end{array}$$

flips

$$x \leq -7$$

*

Whenever you multiply or divide by a negative, you flip the inequality

$$-3x > 12$$

$$-3x > 12$$

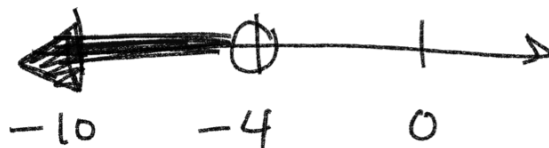
$$-3(0) > 12$$

$$0 > 12 \text{ False}$$

$$-3(-10) > 12 \quad 30 > 12 \text{ true}$$

$$\begin{array}{r} -3x > 12 \\ \underline{-3} \quad \underline{-3} \\ \hline \end{array}$$

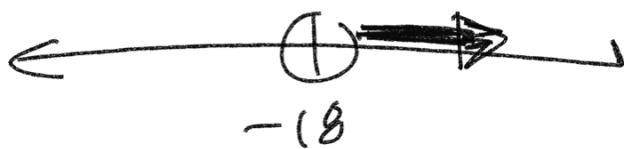
~~$$x < -4$$~~



$$x < -4$$

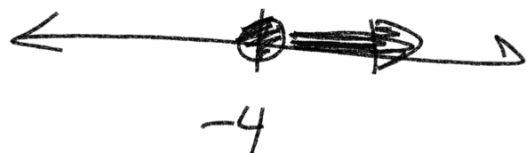
$$-6\left(\frac{x}{-6}\right) < (3)(-6)$$

x ~~is~~ -18 yaw!



$$\frac{8x}{8} \geq \frac{-32}{8}$$

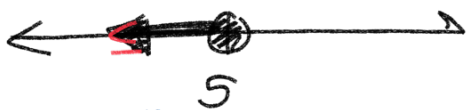
$x \geq -4$ Naw!



$$1.) \quad x - 8 \leq -3$$

$+8$ $+8$

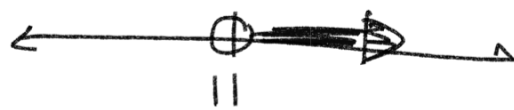
$x \leq 5$



$$2.) \quad 15 < x + 4$$

-4 -4

||| ~~is~~ x

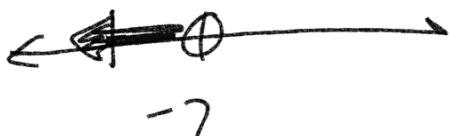


$$3.) \quad \frac{-6x}{-6} > \frac{42}{-6}$$

$*$

\rightarrow flip

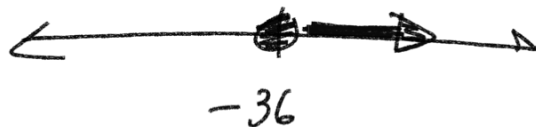
$x < -7$



$$4.) \quad 9(-4) \leq \left(\frac{x}{9}\right)9$$

\oplus \rightarrow

$-36 \leq x$



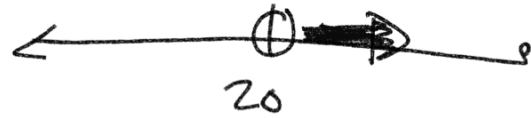
$$1.) \quad \frac{8x}{8} \leq \frac{-56}{8}$$

$$x \leq -7$$



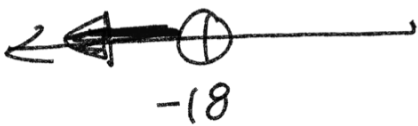
$$2.) \quad \begin{array}{r} 18 < x - 2 \\ +2 & \quad +2 \end{array}$$

$$20 < x$$



$$3.) \quad \begin{array}{r} x \\ -3 \end{array} > (6)(-3)$$

$$x < -18$$



$$4.) \quad \begin{array}{r} 12 \geq x + 5 \\ -5 & \quad -5 \end{array}$$

$$7 \geq x$$

