

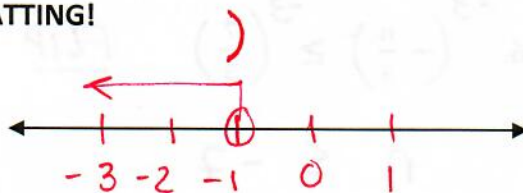
ALGEBRA 1
3-3 PRACTICE WORKSHEET

Name KEY
 Date _____

Solve and graph each inequality. Use PROPER FORMATTING!

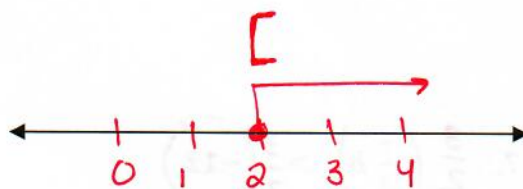
1. $\frac{3}{-3} < \frac{-3a}{-3}$ FLIP

$-1 > a$
 $a < -1$



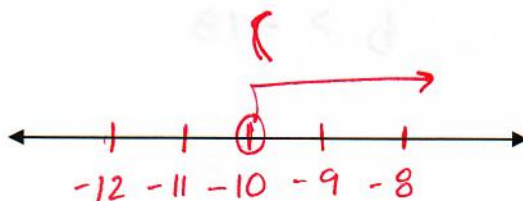
2. $\frac{6.2}{3.1} \leq \frac{3.1m}{3.1}$

$2 \leq m$
 $m \geq 2$



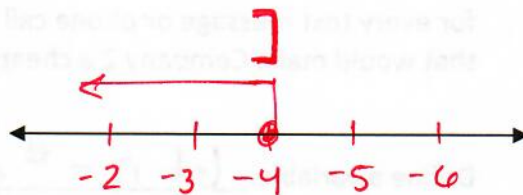
3. $5(-2) < 5\left(\frac{p}{5}\right)$

$-10 < p$
 $p > -10$



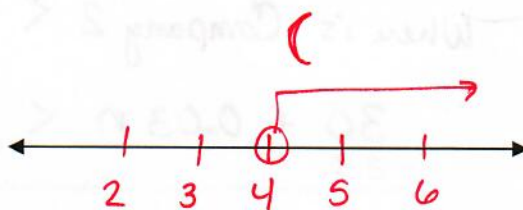
4. $4\left(\frac{x}{4}\right) \leq 4(-1)$

$x \leq -4$



5. $\frac{-4y}{-4} < \frac{-16}{-4}$ FLIP

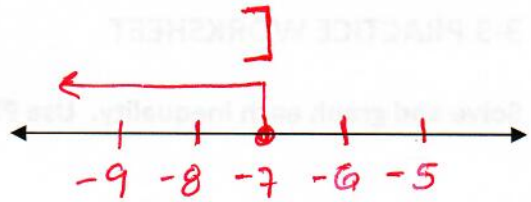
$y > 4$



Solve and graph each inequality. Use PROPER FORMATTING!

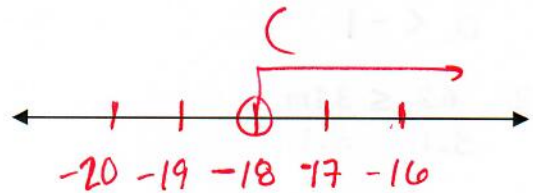
$$6. \quad -3 \left(-\frac{n}{3} \right) \geq -3 \left(\frac{7}{3} \right) \quad \underline{\text{FLIP}}$$

$$n \leq -7$$



$$7. \quad \frac{3}{2} \left(\frac{2}{3} b \right) > \frac{3}{2} (-12)$$

$$b > -18$$



8. You want to start saving money on your cell phone service. Company 1 charges a flat rate of \$40 per month. Company 2 charges a monthly fee of \$30 plus \$0.03 for every text message or phone call. Determine the number of texts/phone calls that would make Company 2 a cheaper choice for cell phone service.

Define a variable. let $n = \#$ of texts/phone calls made

Write an inequality and solve.

$$\text{Company 2} < \text{Company 1}$$

$$\begin{array}{r} 30 + 0.03n < 40 \\ -30 \quad \quad -30 \\ \hline 0.03n < 10 \\ \frac{0.03n}{0.03} < \frac{10}{0.03} \end{array}$$

$$n < 333.\bar{3}$$

If you make less than 333 texts/phone calls, then Company 2 is cheaper.