

## INEQUALITY NOTES

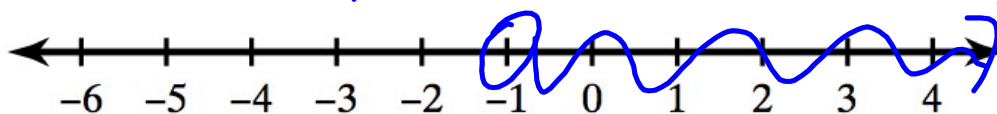
SOLVING INEQUALITIES IS JUST LIKE EQUATIONS. EXCEPT FOR ONE RULE...

**IF YOU DIVIDE/MULTIPLY BY  
A NEGATIVE YOU MUST FLIP  
THE INEQUALITY SIGN!!!**

$$3p + 2p > -5$$

$$\frac{5p}{5} > \frac{-5}{5}$$

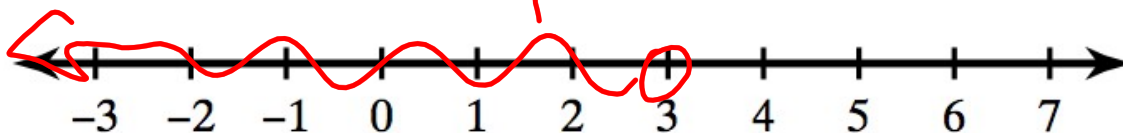
$$p > -1$$



$$\overbrace{-3(3a + 3)} > -36 \quad a < 3$$

$$\begin{array}{r} -9a - 9 > -36 \\ +9 \quad +9 \end{array}$$

$$\begin{array}{r} -9a > -27 \\ \frac{-9a}{-9} > \frac{-27}{-9} \end{array}$$



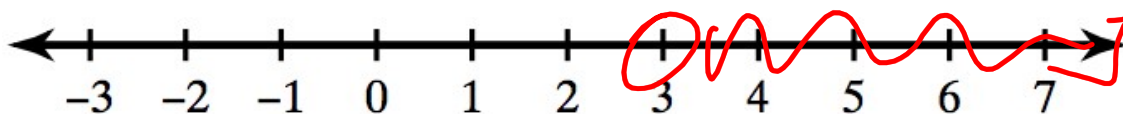
$$\overbrace{-3(x-3)} < 6 - 2x$$

$$\begin{array}{r} -3x + 9 < 6 - 2x \\ + 3x \qquad \qquad \qquad + 3x \end{array}$$

$$9 < 6 + 1x$$

$$\begin{array}{r} -6 \\ -6 \end{array} \quad \begin{array}{r} -6 \\ -6 \end{array}$$
$$3 < x$$

$$x > 3$$



## MISTAKES

$$\begin{array}{r} -2p + 2 > 8 \\ -2 \quad -2 \end{array}$$

$$\begin{array}{r} -2p > \cancel{8} 6 \\ \underline{-2} \quad \underline{-2} \end{array}$$

$$\begin{array}{r} \cancel{p} > \cancel{-4} \\ \cancel{4} \end{array}$$

math error

Flip Sign Wrong

#1: \_\_\_\_\_