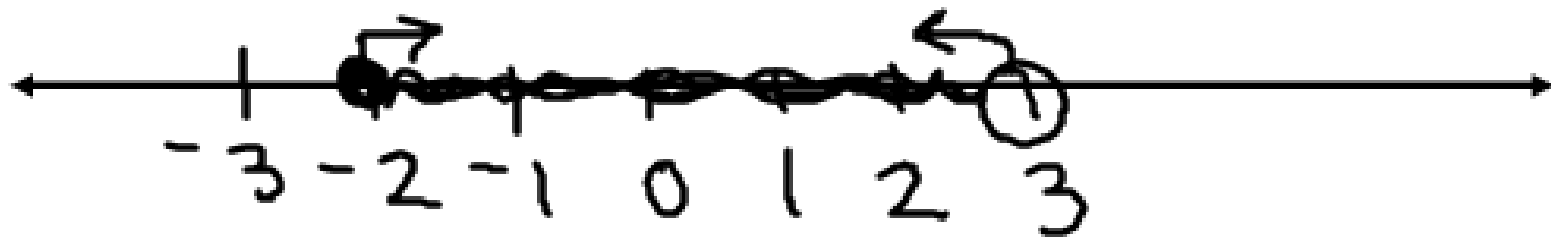


**6 - 4**

**Solving Compound  
Inequalities**

**Ex: Graph the solution set of  
 $x < 3$  and  $x \geq -2$**



Ex: Solve  $-5 < x - 4 < 2$ . Then graph.

$$\begin{array}{r} x - 4 < 2 \\ +4 \quad +4 \end{array}$$

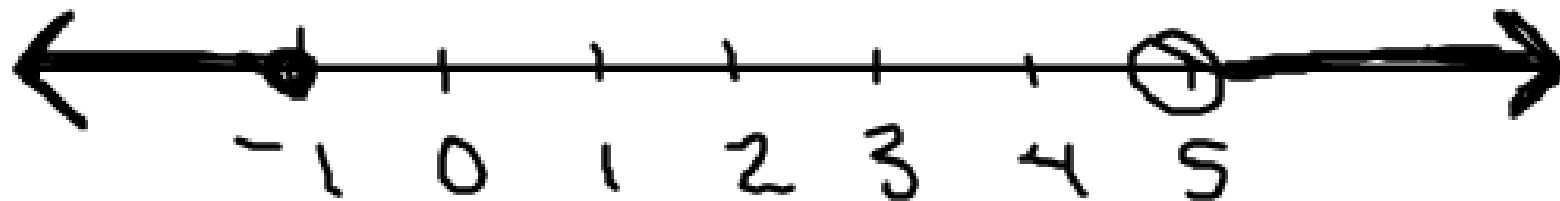
$$x < 6$$

$$\begin{array}{r} x - 4 > -5 \\ +4 \quad +4 \end{array}$$

$$x > -1$$



**Ex: Graph the solution set of**  
 **$x \leq -1$  or  $x > 5$**



Ex: Solve  $-3h + 4 < 19$  or  $7h - 3 > 18$ .  
Then graph.

$$-3h + 4 < 19$$

~~4~~   ~~-4~~

$$-3h < 15$$

~~-3~~   ~~-3~~

$$h > -5$$

$$7h - 3 > 18$$

~~-3~~   ~~+3~~

$$7h > 21$$

~~7~~   ~~7~~

$$h > 3$$





Homework:

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