

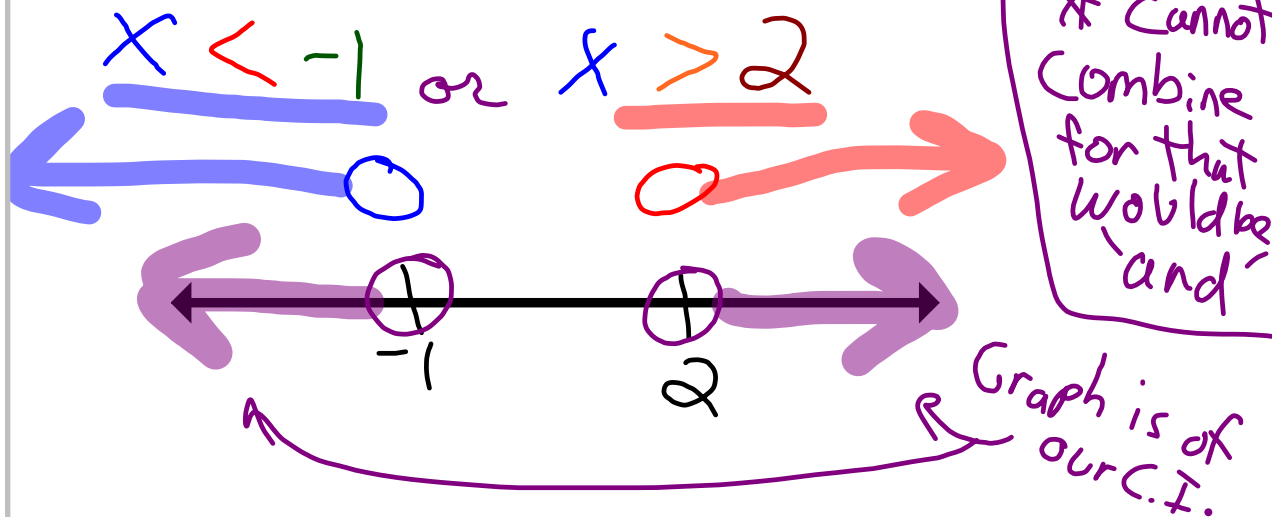
6.5. Solving

Dec. 15, 2006

Compound Inequalities w/ "OR"

$\text{or } \{2, 4, 6, 8\} \text{ or } \{1, 2, 3, 4, 5\}$ *Union all together*
 $\text{Union} = \{1, 2, 3, 4, 5, 6, 8\}$

Write a Compound Inequality that represents \mathbb{R} less than -1 OR greater than 2.

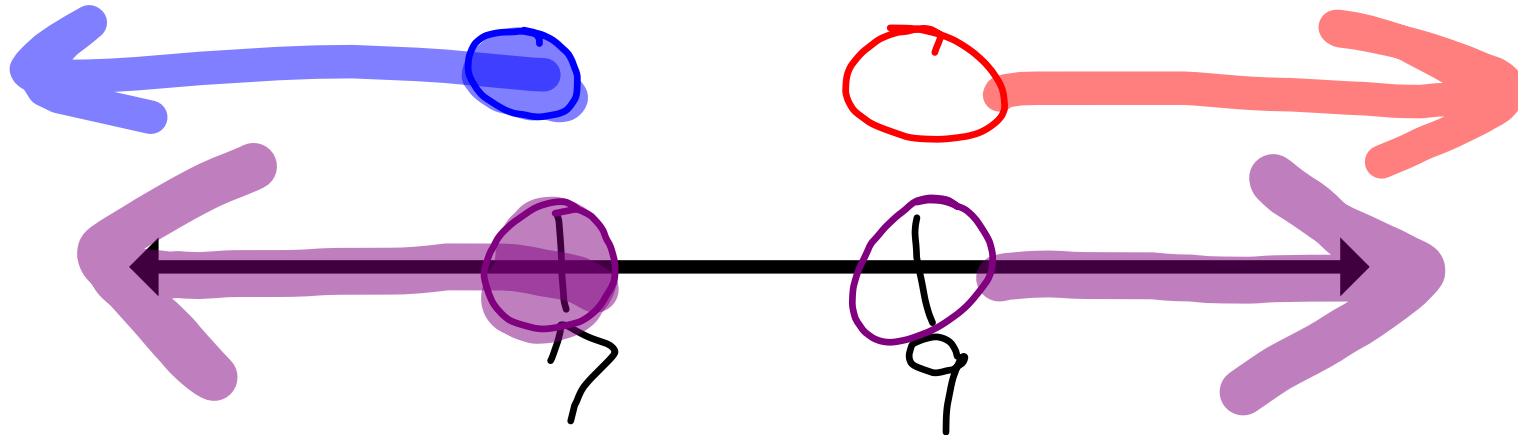


Solve "OR"

$$\begin{array}{r} x - 4 \leq 3 \\ +4 \quad +4 \\ \hline x \leq 7 \end{array} \quad \text{or} \quad \begin{array}{r} 2x > 18 \\ \hline x > 9 \end{array}$$

↓

$x \leq 7 \quad \text{or} \quad x > 9$



$$\begin{array}{r} -3x + 1 \geq 4 \\ \hline -1 \quad -1 \end{array}$$

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

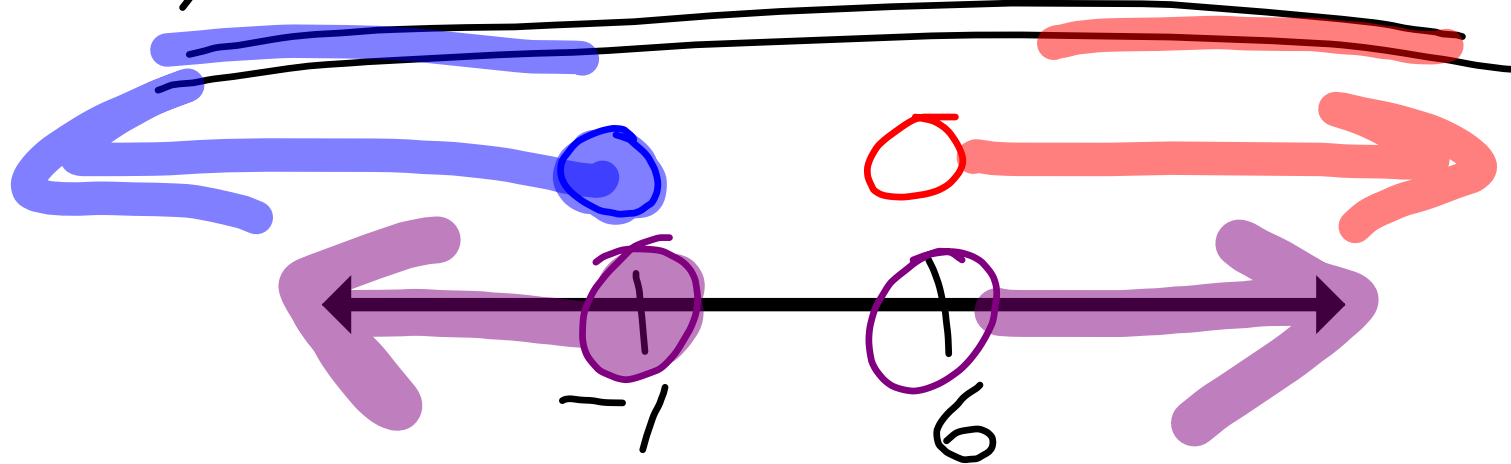
$$x \leq -1$$

or

$$\begin{array}{r} 2x - 5 > 7 \\ \hline +5 \quad +5 \end{array}$$

$$\begin{array}{r} 2x > 12 \\ \hline 2 \quad 2 \end{array}$$

$$x > 6$$



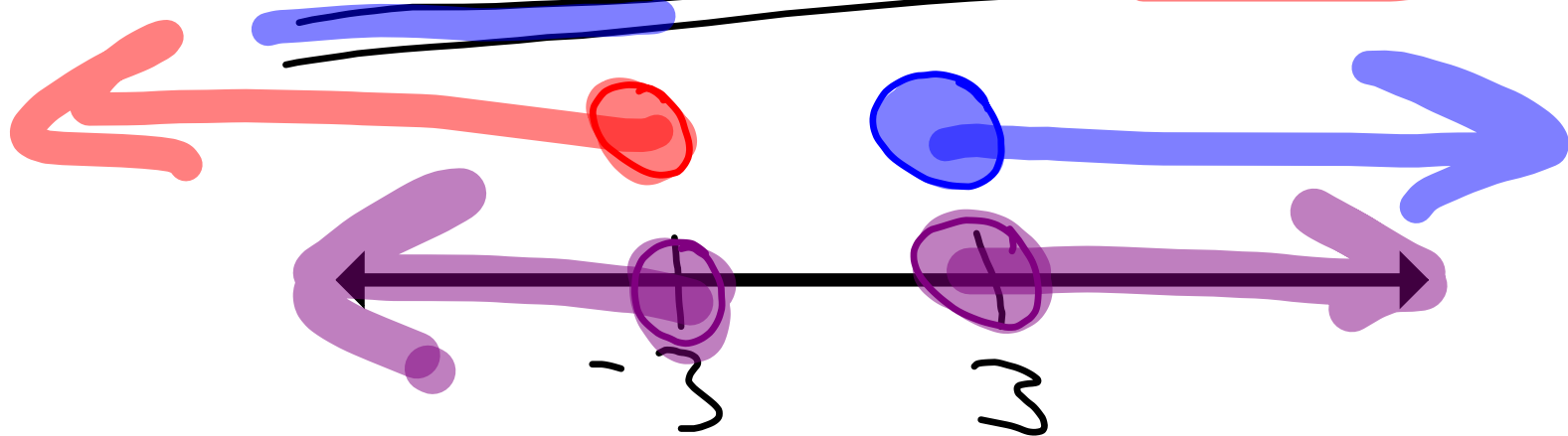
$$1 - 5x \leq -14 \quad \text{or} \quad -3x - 2 \geq 7$$

$$\frac{-5x \leq -15}{-5}$$

$$\frac{-3x \geq 9}{-3}$$

$$x \geq 3 \quad \text{or}$$

$$x \leq -3$$



O.T.L.

Pg 352: 21, 24, 25, 28,
29, 32, 33, 36-40(a)