

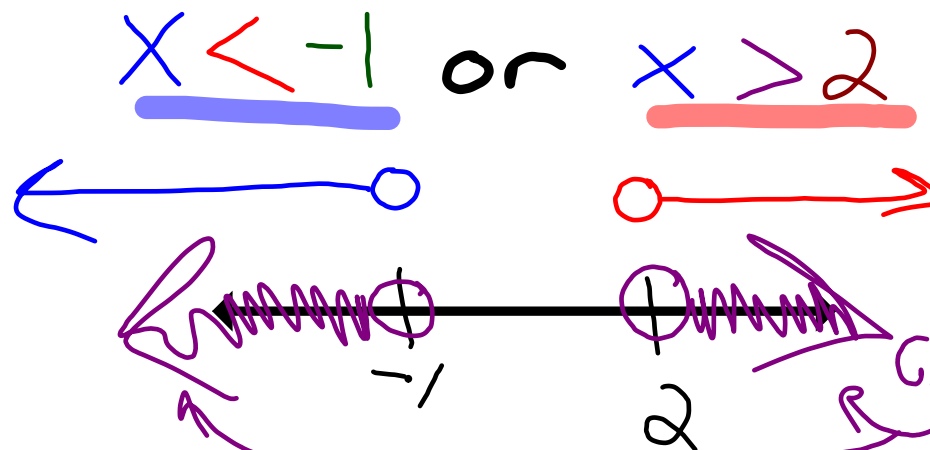
6.5. Solving

April. 30, 2007

Compound Inequalities w/ "OR"

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

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



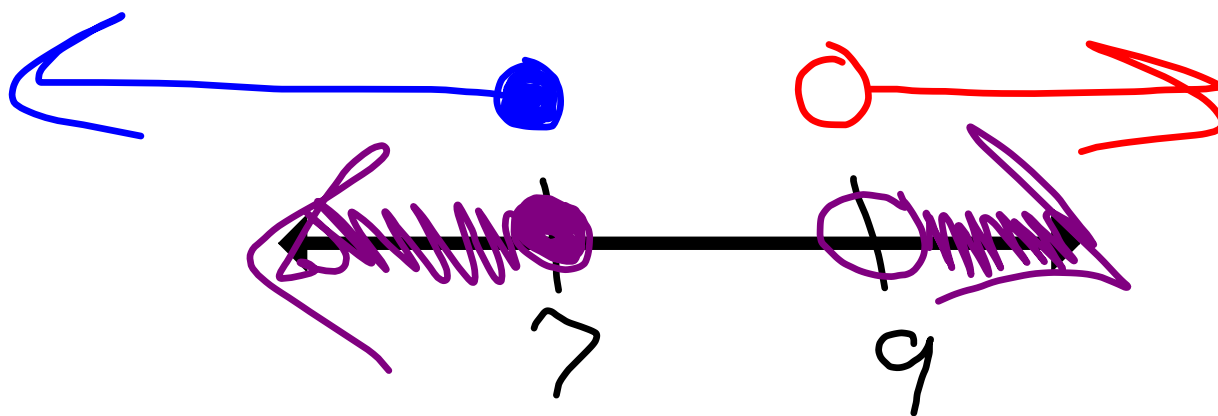
* Cannot
Combine
for that
would be
'and'

Graph is of
our C.I.

Solve "OR"

$$\begin{array}{r} x - 4 \leq 3 \\ +4 \quad +4 \\ \hline x \leq 7 \end{array}$$

$$\begin{array}{r} \text{or} \quad 2x > 18 \\ \hline x > 9 \end{array}$$



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

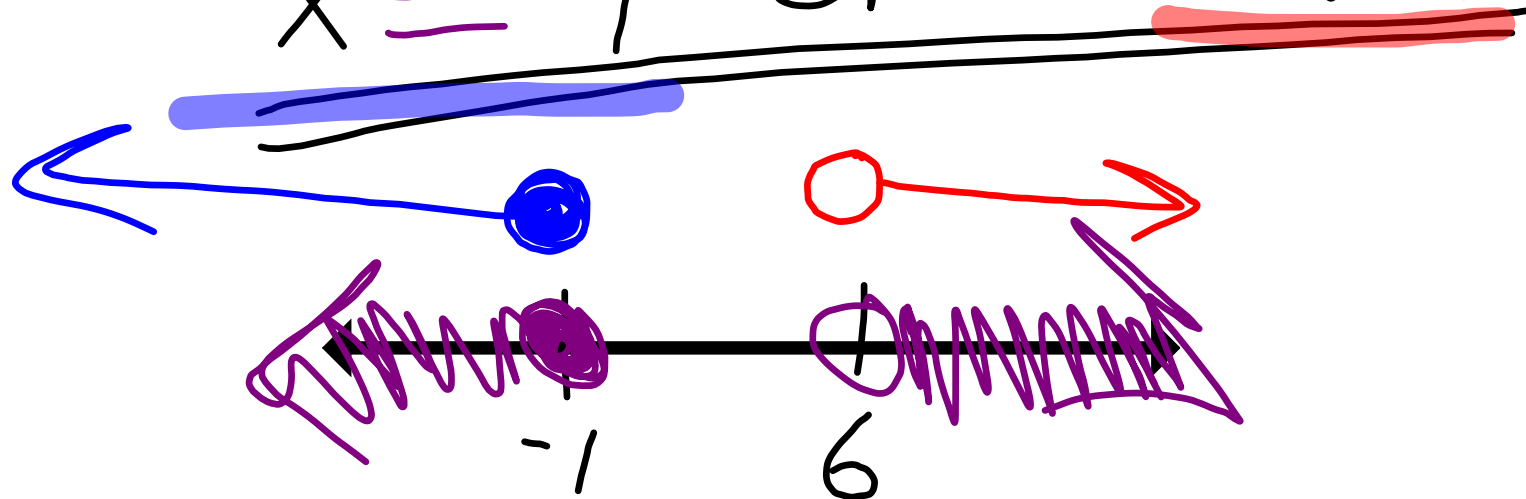
$$\begin{array}{r} -3x \geq 3 \\ -3 \quad -3 \\ \hline \end{array}$$

$$x \leq -1$$

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

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

$$x > 6$$



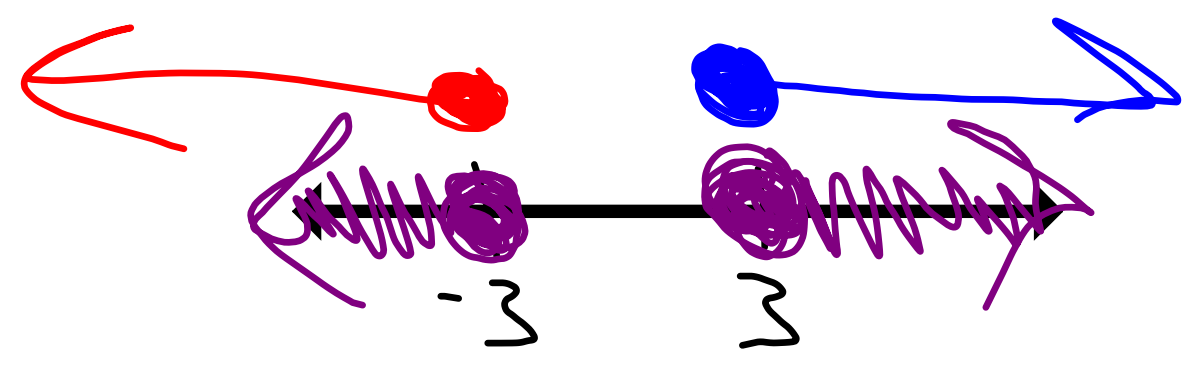
$$\textcircled{-1} - 5x \leq -14 \quad \text{or} \quad -3x - 2 \geq 7$$

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

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

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

$$x \leq -3$$



O.T.L.

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