

b.7.  
cont.

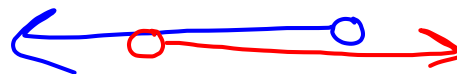
May 14, 2007

$$|3x+2|-5 < 0$$
$$\begin{array}{r} +5 \quad +5 \\ \hline |3x+2| < 5 \end{array}$$

$$\begin{array}{r} 3x+2 < 5 \\ -2 \quad -2 \\ \hline 3x < 3 \\ \hline x < 1 \end{array} \quad \text{and} \quad \begin{array}{r} 3x+2 > -5 \\ -2 \quad -2 \\ \hline 3x > -7 \\ \hline x > -\frac{7}{3} \end{array}$$

and...  
intersection...  
What's in  
Common

$$\underline{x < 1} \quad \text{and} \quad \underline{x > -\frac{7}{3}}$$



$$|-3x - 9| - 2 \geq 7$$

$$\begin{array}{r} \phantom{+2} \phantom{+2} \\ \hline |-3x - 9| \geq 9 \end{array}$$

$$\begin{array}{l} -3x - 9 \geq 9 \quad \text{or} \quad -3x - 9 \leq -9 \\ \hline \phantom{+9} \phantom{+9} \phantom{+9} \phantom{+9} \\ -3x \geq 18 \qquad \qquad \qquad -3x \leq 0 \\ \hline \phantom{+9} \phantom{+9} \phantom{+9} \phantom{+9} \\ -3 \qquad \qquad \qquad -3 \end{array}$$

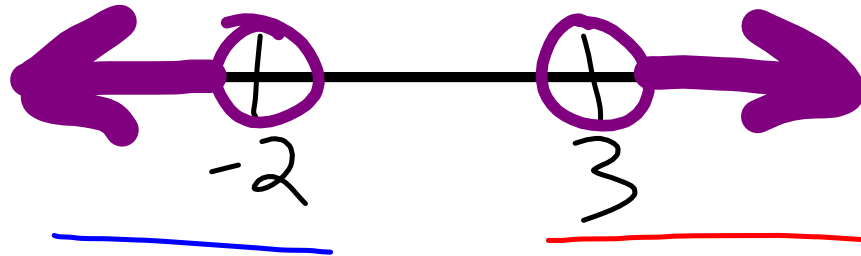
$$x \leq -6 \quad \text{or} \quad x \geq 0$$

Switch cause  $\div$  by  $-3$

or... Union... All together

-6      0

Write  
the  
Compound  
Inequality



1<sup>st</sup>: write the  
word...  
this looks like  
"or"

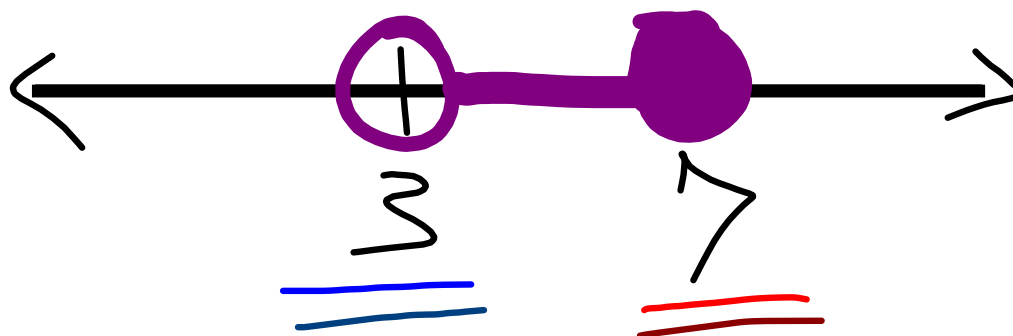
$$x < -2 \text{ or } x > 3$$

2<sup>nd</sup>: write the "x"

3<sup>rd</sup> + 4<sup>th</sup>: write the  
# 's + the inequality sign



Write  
the  
Compound  
Inequality



$$\underline{\underline{x > 3 \text{ and } x \leq 7}}$$

Is there another  
way to write  
the "and"  
inequality?

$$3 < x \text{ and } x \leq 7$$

$$\underline{\underline{3 < x \leq 7}}$$

O.T.L.

① Study for Quiz Tomorrow

② Correct y-day's

Turn this  
in today

→  
tomorrow

if not

Completed

③

Pg

365

O.T.L.

: 36-41 all

→ Separate  
Sheet  
of  
paper

**Quiz Tomorrow**

O.T.L.

① Ex 5 pg 363 into Notes

② pg 364-365: 8, 9, 12, 13,  
15, 17, 21, 24, 25, 30,  
34, 37, 40, 41, 42

③ Quiz **Monday**