

pg 358-359

10

$$36 + -36$$

11

$$9 + -9$$

12

No Solution

16

$$2 + -4$$

20

$$1 + -17$$

23

$$3.5 + -3.5$$

24

$$60 + -20$$

26

$$-12 + -18$$

27

$$18 + -18$$

32

$$1 + -\frac{1}{3}$$

36

$$7 + -6$$

39

$$11 + -7$$

40

$$4 + -\frac{5}{12}$$

41

$$a$$

42

$$c$$

43

$$b$$

47

M.D. Pt 92.95 M.//M.//g  
Distance: 1.55 M.//M.//g

(48)  
 $(x - 92.95) = 1.55$

b. > Solving Absolute- May 10, 2007

Value w/ Inequalities!

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Absolute Value Inequality has 1 of 4 forms

$$|ax+b| > c$$

$$|ax+b| < c$$

$$|ax+b| \geq c$$

$$|ax+b| \leq c$$

greater  
great-'or'

"OR"

Union => All  
Together

less than  
less-'and'

"AND"

Intersect => In common

Recall

$$|ax+b|=c$$

$ax+b=c$  or  $ax+b=-c$

*(An orange bracket connects the two equations with a  $*-1$  written below it.)*

Now

$$|ax+b|>c$$

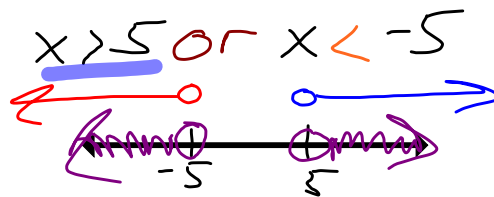
$ax+b>c$  or  $ax+b<-c$

*we flip the Inequality sign  
Since we  $*-1$*

$$|ax+b|<c$$

$ax+b<c$  and  $ax+b>-c$

$$|x| > 5$$



or...  
Union...  
All together

Check: Let's check zero, Because zero is such a NICE #.

Now, For this Problem,  
zero IS NOT a part  
of my Purple graph.

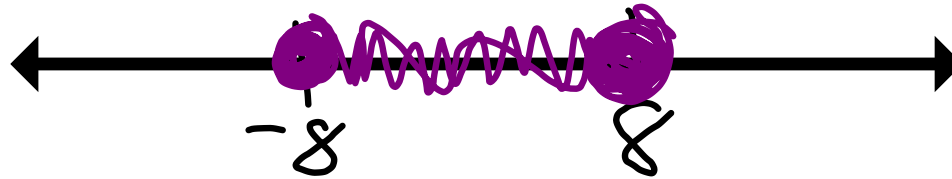
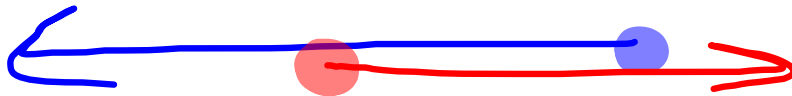
So... if we check zero,  
we should discover that  
it DOES NOT work!

$$\begin{array}{l} |x| > 5 \\ |0| > 5 \\ 0 > 5 \end{array} \quad \begin{array}{l} \text{zero did} \\ \text{NOT work} \\ \text{So... my} \\ \text{graph is} \\ \text{correct.} \end{array}$$

$$|y| \leq 8$$

$$y \leq 8 \text{ and } y \geq -8$$

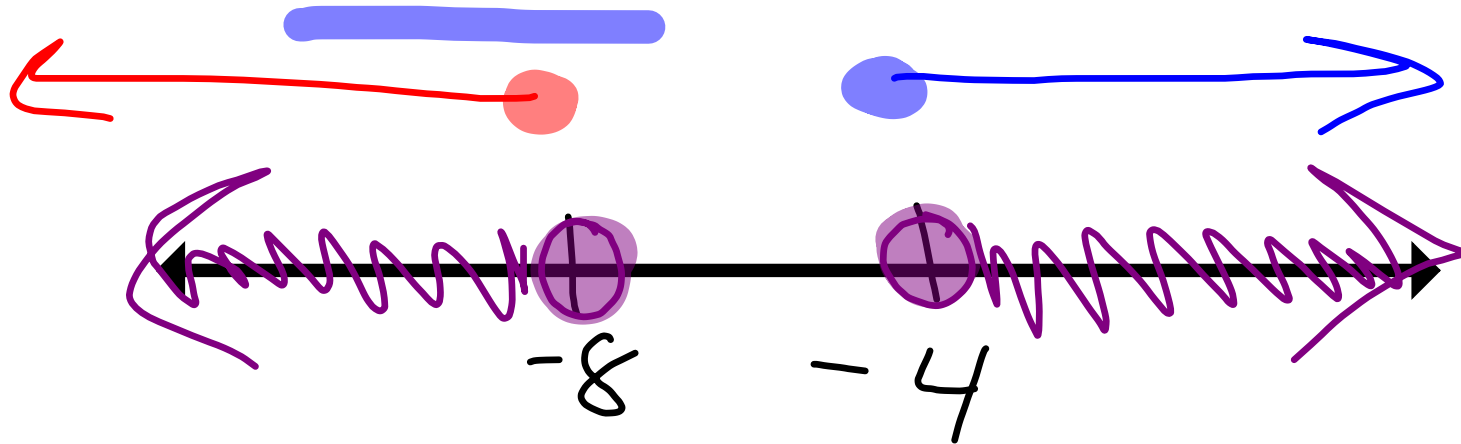
and...  
intersection  
What's in  
Common



$$|x+6| \geq 2$$

or...  
Union...  
All  
Together

$$\begin{array}{r} x+6 \geq 2 \text{ or } x+6 \leq -2 \\ \underline{-6 \quad -6} \qquad \underline{-6 \quad -6} \\ x \geq -4 \qquad \qquad x \leq -8 \end{array}$$



$$|x-4| < 3$$

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

and  $x-4 > -3$

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



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**