

pg 358-359

- ⑩ 36 + -36
- ⑪ 9 + -9
- ⑫ No Solution
- ⑬ 2 + -4
- ⑭ 1 + -17
- ⑮ 3.5 + -3.5
- ⑯ 60 + -20
- ⑰ -12 + -18

- ⑱ 18 + -18
- ⑲ 1 + $\frac{1}{3}$
- ⑳ 7 + -6
- ㉑ 11 + -7
- ㉒ 4 + - $\frac{12}{5}$
- ㉓ a
- ㉔ c
- ㉕ b
- ㉖ M.D. Pt 92.95 M.I. M.I.s
- ㉗ Distance: 1.55 M.I. M.I.s

$$\textcircled{48}$$

$$\underline{\underline{(x - 92.95) = 1.55}}$$

b. > Solving Absolute- May 10, 2007 Value w/ Inequalities!

Absolute Value Inequality has 1 of 4 forms

$$|ax+b| > c$$

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

greater
great-'or'

"OR"

Union $\Rightarrow$ All
Together

$$|ax+b| < c$$

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

less than
less than
"AND"

Intersect $\Rightarrow$ In common

Recall

$$|ax+b|=c$$

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

$\swarrow \quad \searrow$

$\xrightarrow{\quad * -1 \quad}$

Now

$$|ax+b|>c$$

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

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

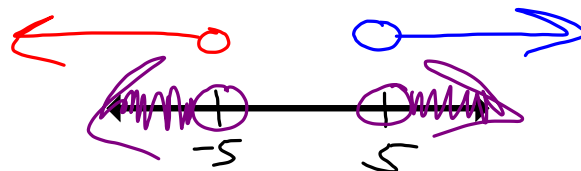
$$|ax+b|<c$$

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

$$|x| > 5$$

or...
Union...
All to-
gether

$$\underline{x > 5} \text{ or } \underline{x < -5}$$



Check: I like to check zero,
Because zero is such a Nice #.

But, for this Problem

Zero IS NOT a part
of the Graph.

SO... if I check with zero,
I should discover that
Zero DOES NOT work!

$$|x| > 5$$

$$|0| > 5$$

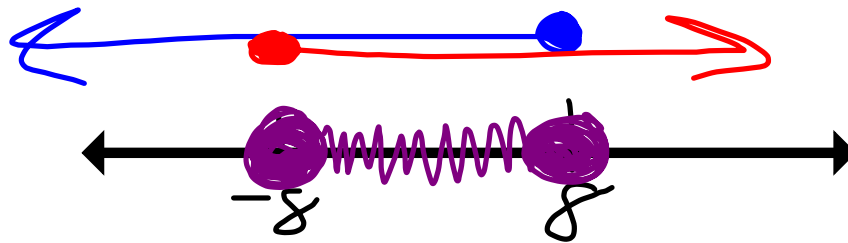
$$0 > 5$$

So... My Graph
is Correct

$$|y| \leq 8$$

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

and...
intersection
What's in
Common



Check Zero: It should work?

$$|0| \leq 8$$

$$0 \leq 8 \checkmark$$

so... My
Graph is
Correct

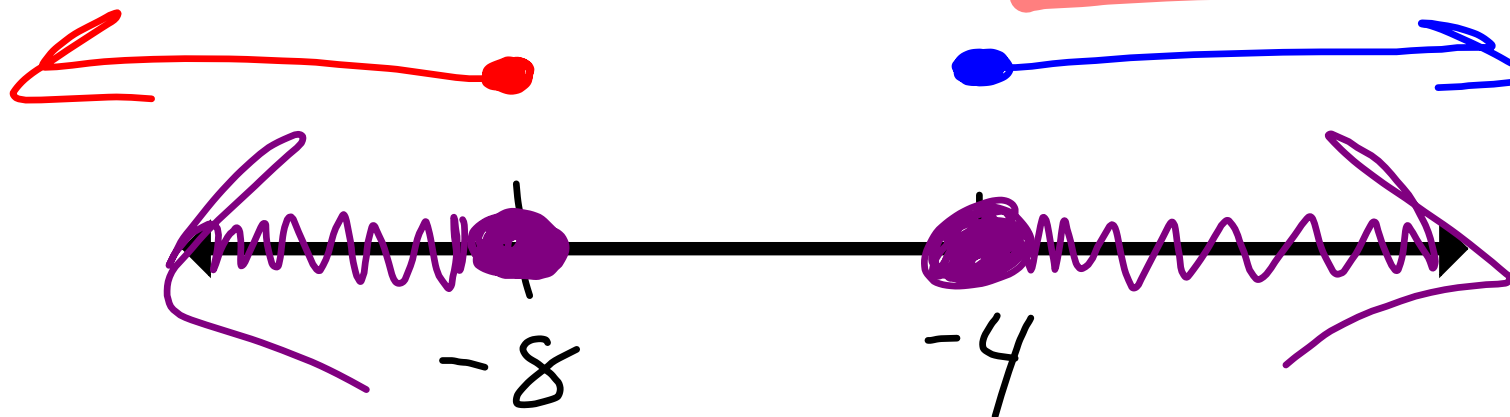
or...
union...
All together

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

$$\begin{array}{r} x+6 \geq 2 \\ -6 \quad -6 \\ \hline x \geq -4 \end{array}$$

or

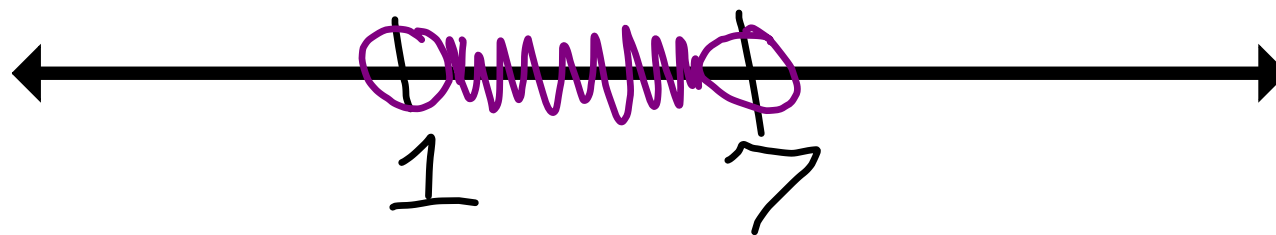
$$\begin{array}{r} x+6 \leq -2 \\ -6 \quad -6 \\ \hline x \leq -8 \end{array}$$



$$|x-4| < 3$$

and...
intersection...
What's in common

$$\begin{array}{rcl} x-4 < 3 & \text{and} & x-4 > -3 \\ +4 & & +4 \\ \hline x < 7 & \text{and} & x > 1 \end{array}$$



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**