Hwk #8 Sec 1-5

Page 36 You DON'T need to graph the solutions

Problems 10, 14, 20, 23, 41, 47, 51

Due Tomorrow

Solve. $|3x + 8| + 29 > 17$

$-29 \quad -29$

$|3x+8| > -12$ ← The absolute value is ALWAYS going to be greater than a negative number

All Real Numbers

Solve. $2|x + 13.9| + 43 \leq 5$

$-43 \quad -43$

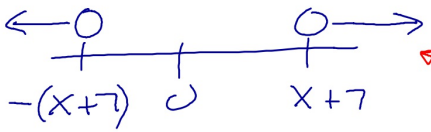
$\frac{2|x+13.9|}{2} \leq \frac{-38}{2}$

$|x+13.9| \leq -19$ ← The absolute value will Never be less than a negative number!

NO SOL

$|x| \geq k$ is equivalent to $x \leq -k$ or $x \geq k$.

Solve. $|3x + 4| \geq x + 7$ This is asking where you could be on a number line and be more than x+7 from zero



$3x+4 \leq -(x+7)$ or $3x+4 \geq x+7$

$3x+4 \leq -x-7$ $\quad -x$

$+x \quad +x$

$4x+4 \leq -7$ $\quad 2x+4 \geq 7$

$4x \leq -11$ $\quad 2x \geq 3$

$x \leq -11/4$ or -2.75 OR $x \geq 3/2$ or 1.5

Evaluate for: A = -5 B= -6 C = 4

1. $-B^2 - 2C^2 - AB$

$-(-6)^2 - 2(4)^2 - (-5)(-6)$

$-36 \quad -32 \quad -30$

$= \boxed{-98}$

2. $-3|B - C| - |A|$

$-3|-6-4| - |-5|$

$-3|-10| - 5$

$-30 - 5 = \boxed{-35}$

Solve for E. State Restrictions on the variables.

$$CT\left(\frac{WE - KR}{CT}\right) = \left(Z - \frac{E + M}{G}\right)\frac{CT}{1}$$

$$G(WE - KR) = \left(ZCT - \frac{ECT + MCT}{G}\right)G$$

$$WEG - KRG = ZCTG - (ECT + MCT)$$

$$WEG - KRG = ZCTG - ECT - MCT$$

$$WEG + ECT = ZCTG - MCT + KRG$$

factor out the E

$$\frac{E(WG + CT)}{WG + CT} = \frac{ZCTG - MCT + KRG}{WG + CT}$$

$G, CT \neq 0$

$WG + CT \neq 0$