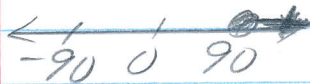
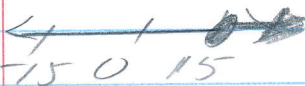


Hw: Intro to Inequalities 11/14

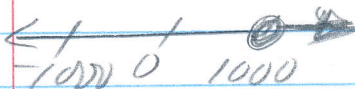
1.) $x \geq 90$



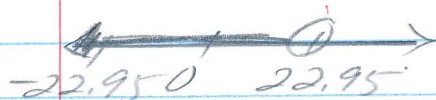
2.) $x \geq 15$



3.) $x \geq 1000$



4.) $x < 22.95$

5.) a.) -4 is greater than x b.) ~~no, -4 is greater than x~~

c.) no, b/c -4 is equal to -4, not greater than itself.

424 243 24

* 6.)
$$\begin{bmatrix} 1 & w + \frac{5}{4} = \frac{-11}{1} \\ \frac{4}{4} & \end{bmatrix}$$

$$4w + 5 = -244$$

$$\begin{array}{r} -15 \qquad -15 \\ \hline 4w = -279 \\ 4 \qquad 4 \end{array}$$

$$w = -69\frac{3}{4} \text{ or } -69.75$$

$$7.) \quad [-3x - 4.6 = 59 - 5x]$$

$$-30x - 46 = 59 - 50x$$

$$+50x \qquad \qquad \qquad +50x$$

$$\hline 20x - 46 = 59$$

$$+46 \quad +46$$

$$\hline 20x = 105$$

$$\frac{20x}{20} = \frac{105}{20}$$

$$x = 5.25 \text{ or } 5\frac{1}{4}$$

$$8.) \quad 3(h-4) = 12h + 16 - 9h$$

$$3h - 12 = 3h + 16$$

$$-3h \quad \quad -3h$$

$$\hline -12 \neq 16$$

no solution

careful w/ signs

$$9.) \quad 15 - 2(4n + 7) = -6n - 2(n + 1) + 3$$

$$15 - 8n - 14 = -6n - 2n - 2 + 3$$

$$1 - 8n = -8n + 1$$

same

infinite many solutions

$$10.) \quad \frac{225 \cdot (2)}{3} = \frac{450}{3}$$

$$= 150$$

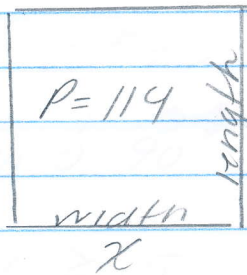
spent

$$\begin{array}{r} 150 \\ 3 \overline{)450} \\ \underline{-30} \\ 15 \\ \underline{-15} \\ 0 \end{array}$$

$$\begin{array}{r} 225 \\ \underline{-150} \\ 75 \end{array}$$

\$75 left to spend on a delicious meal! yum!!

11.)



$$P = 114$$

$$4x - 3$$

$$P = 2l + 2w$$

$$4(12) - 3$$

$$48 - 3$$

$$45$$

$$114 = 2(4x - 3) + 2x$$

$$114 = 8x - 6 + 2x$$

$$114 = 10x - 6$$

$$+6 = +6$$

$$120 = 10x$$

$$\frac{120}{10} = \frac{10x}{10}$$

$$\text{ans } x = 12$$

$$\text{width} = 12 \text{ ft}$$

$$\text{length} = 45 \text{ ft}$$

$$12.) (-9x + 7) - 1(12x - 6)$$

$$-9x + 7$$

$$-12x + 6$$

$$-21x + 13$$