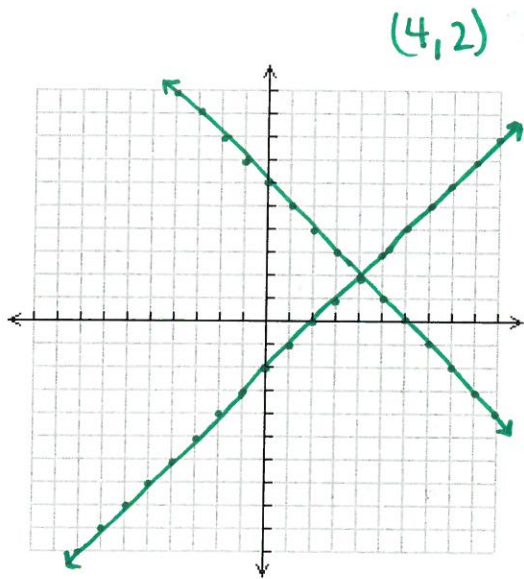


Module 5

Write all solutions as an ordered pair (x, y)

{1} Solve the system by graphing:

$$\begin{cases} y = -x + 6 \\ y = x - 2 \end{cases}$$



{2} Solve the system by substitution:

$$\begin{cases} -2x - y = -35 \\ y = -x + 15 \end{cases}$$

$$-2x - (-x + 15) = -35$$

$$-2x + x - 15 = -35$$

$$-x - 15 = -35$$

$$\begin{array}{r} -x - 15 = -35 \\ +15 \quad +15 \\ \hline -x = -20 \end{array}$$

$$-x = -20$$

$$\boxed{x = 20}$$

$$\boxed{y = -20 + 15 = -5}$$

$$(20, -5)$$

{3} Solve the system by elimination:

$$\begin{cases} 2x + y = 3 \\ 2x + 2y = 2 \end{cases}$$

$$-y = 1$$

$$\boxed{y = -1}$$

$$2x - 1 = 3$$

$$+1 \quad +1$$

$$2x = 4$$

$$\boxed{x = 2}$$

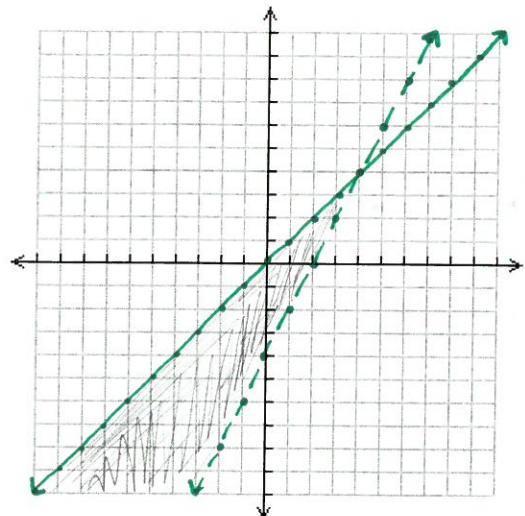
$$(2, -1)$$

{4} Graph the system of inequalities:

$$\begin{cases} x \geq y \\ 2x - y < 4 \end{cases}$$

$$y \leq x$$

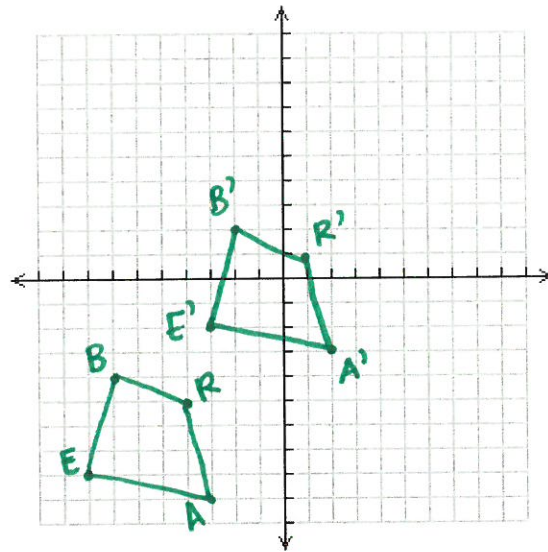
$$y > 2x - 4$$



Module 6

{5} Plot the points:

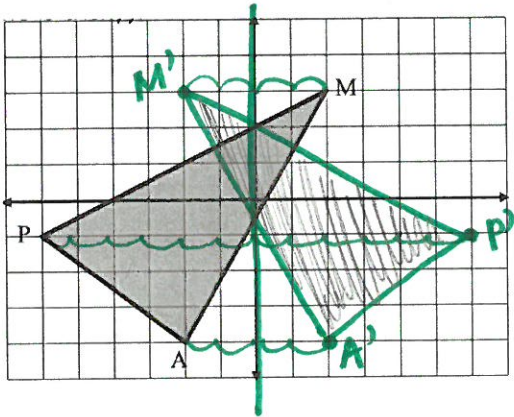
$$\begin{aligned} B(-7, -4) &\rightarrow (-2, 2) \\ E(-8, -8) &\rightarrow (-3, -2) \\ A(-3, -9) &\rightarrow (2, -3) \\ R(-4, -5) &\rightarrow (1, 1) \end{aligned}$$



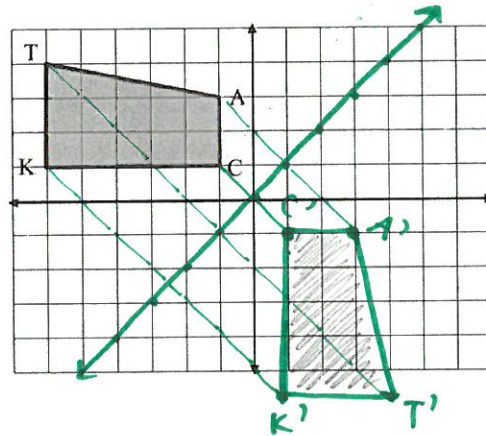
Translate: $(x + 5, y + 6)$

Remember to use appropriate notation.

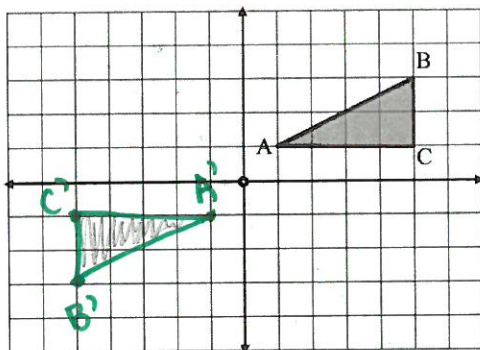
{6} Reflect MAP over the y-axis.



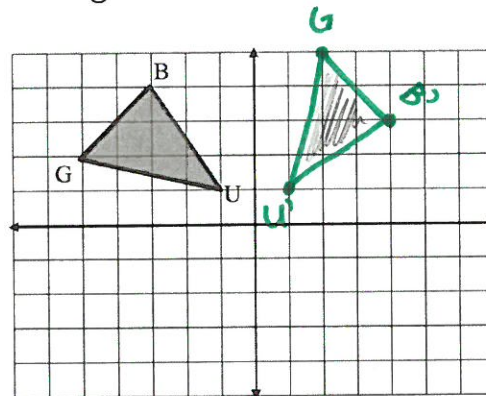
{7} Reflect TACK over $y = x$



{8} Rotate ABC 180° about the origin



{9} Rotate BUG 90° clockwise about the origin



{10} Give the slope of a line that is parallel and perpendicular to $y = \frac{2}{3}x + 4$

parallel slope = $-\frac{2}{3}$

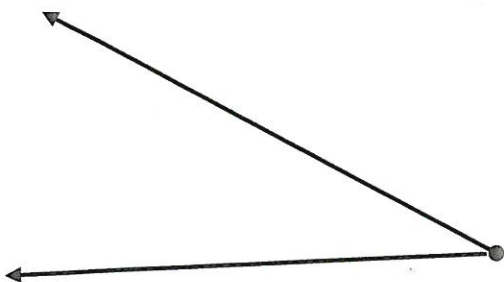
perpendicular slope = $+\frac{3}{2}$

Module 7/8

use a compass

{11} Sketch the constructions.

{a} Copy and bisect the angle.

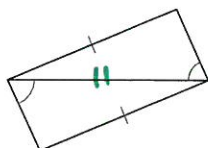


{b} Copy and bisect the segment.



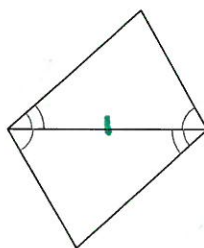
{12} State if the two triangles are congruent. If they are, state which reason is most appropriate: SSS, SAS, ASA, AAS, or HL.

{a}



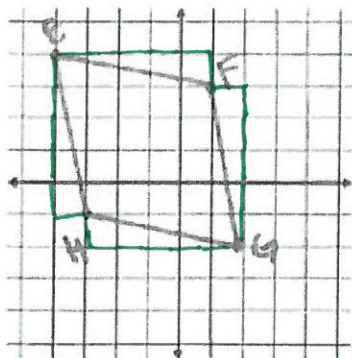
no, NO ASS in math

{b}



yes, ASA

{13} Find the slopes and lengths of each side, then identify the shape and explain why it is that shape using the slopes and side lengths you found.



Slopes: $m_{EF} = -1/5$ $m_{GH} = -1/5$ $-1/5 \cdot -5/1 = 1 \neq -1$
 $m_{FG} = -5/1$ $m_{HE} = -5/1$ \perp
not

Side lengths: $\sqrt{1^2 + 5^2} = \sqrt{1+25} = \sqrt{26}$
 all side lengths = $\sqrt{26} \approx 5.10$
 units in length

Shape and explanation:

4 \cong sides
 2 sets of \cong slopes
 \perp not \perp \Rightarrow rhombus

Module 9

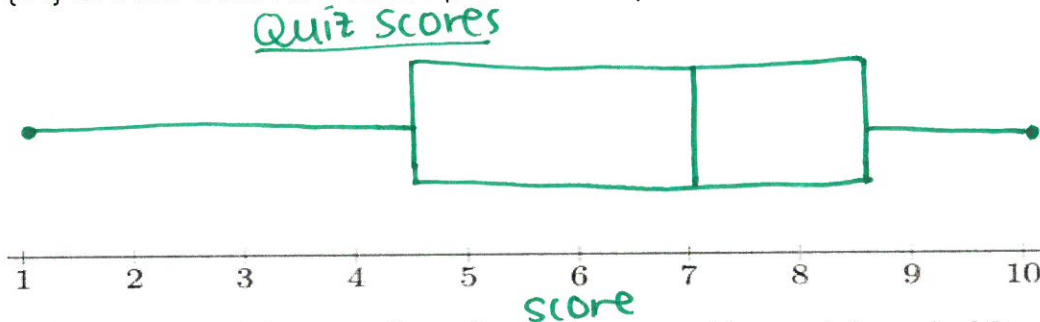
Use the following data to answer questions 14 & 15.

Quiz scores for 3rd period are as follows:

3, 7, 10, 8, 2, 7, 6, 8, 9, 2, 5, 7, 10, 9, 8, 4, 6, 7, 5, 9, 7, 4, 9, 8, 1

Handwritten data analysis:
 1 2 2 3 4 4 5 5 6 6 7 7 7 7 8 8 8 9 9 9 10 10
 Q1 = 4.5 Q2 = 7 Q3 = 8.5

{14} Create a Box & Whisker plot for the quiz scores.



{15} Create a Histogram from the quiz scores. Use an interval of 2.



Grade	English	History	Math/Science	Other	Totals
7th Grade	38	36	28	14	116
8th Grade	47	45	72	18	182
Totals	85	81	100	32	298

{16} Using the above Two -Way Frequency table, calculate the relative frequency of **row values**.

Grade	English	History	Math/Science	Other	Totals
7th grade	32.8%	31.0%	24.1%	12.1%	100%
8th grade	25.8%	24.7%	39.6%	9.9%	100%
Totals	28.5%	27.2%	33.6%	10.7%	100%