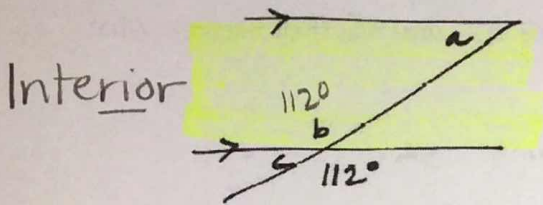


FOM 11 – Flashback #1

Name: KEY

1. Determine the measure for all of the indicated angles and provide a reason for each.



lines are parallel \rightarrow
 $\angle b = 112^\circ$ vertically opposite to 112°
 $\angle a = 68^\circ$ interior to $\angle b (=180^\circ)$
 $\angle c = 68^\circ$ supplementary to 112°
 or supplementary to $\angle b$
 or corresponding to $\angle a$

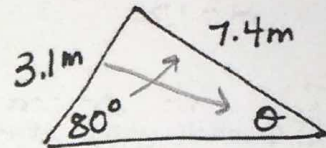
2. Determine the indicated angle given the following information.

$$\frac{\sin \theta}{3.1} = \frac{\sin 80}{7.4}$$

$$\sin \theta = \frac{(\sin 80)(3.1)}{7.4}$$

$$\theta = \sin^{-1} \left[\frac{(\sin 80)(3.1)}{7.4} \right]$$

$$\theta = 24^\circ$$



*make sure calculator is in degrees

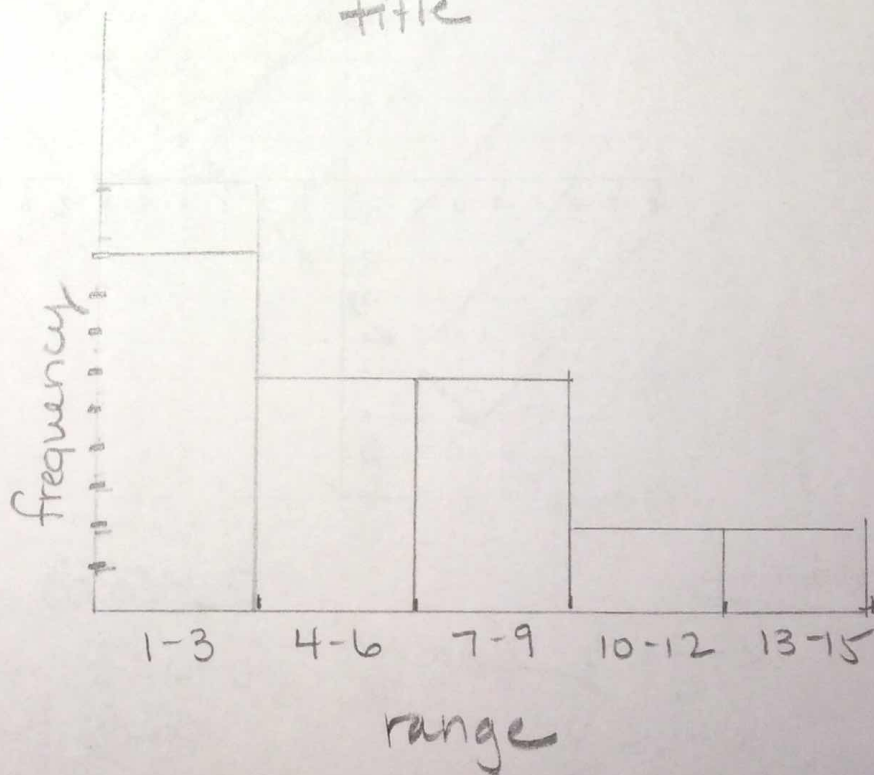
3. Create a frequency table and histogram from the following data:

2	1	12	15	5
5	9	1	12	7
9	8	6	1	3
7	3	6	3	15
6	2	1	4	9

\rightarrow ^{min} 5 sections

title

1-3	###	9
4-6	###	6
7-9	###	6
10-12		2
13-15		2



4. Given that $\bar{x} = 59$ and $\sigma = 6.2$, if a person scored 62 on the test, what was their z-score? What percent of the scores are less than theirs?

$$z = \frac{x - \bar{x}}{\sigma}$$

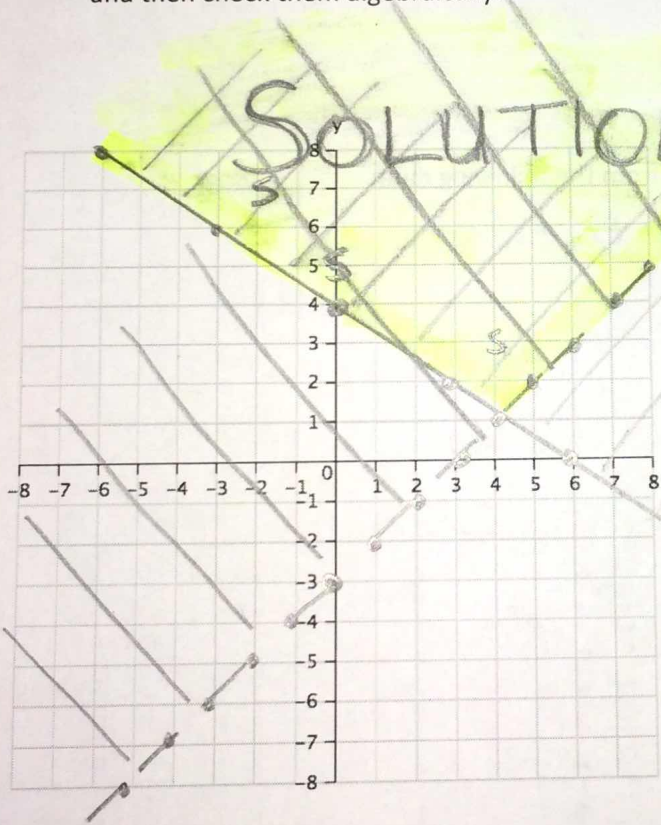
$$z = \frac{62 - 59}{6.2}$$

$$z = 0.484$$

$$\rightarrow 0.6844$$

which means did better than 68.44%

5. Graph the system $2x + 3y \geq 12$ and $x - y < 3$. Determine 3 possible solutions from the graph and then check them algebraically.



Line 1

→ solid line

$$2x + 3y \geq 12$$

$$\frac{3y}{3} \geq \frac{-2x + 12}{3}$$

$$y \geq -\frac{2}{3}x + 4$$

going down slope

↑ y-int

test point (0, 0)

$$2(0) + 3(0) \geq 12$$

$$0 \geq 12$$

false ∴ shade above line

Line 2

$$x - y < 3 \rightarrow \text{dashed line}$$

$$x - 3 < y$$

↑ up slope = 1
↑ y-int

Test (0, 0)

$$0 - 0 < 3$$

$$0 < 3$$

true

Solutions (many!)

$$(4, 3)$$

$$8 + 9 \geq 12 \checkmark$$

$$4 - 3 < 3 \checkmark$$

$$(2, 7)$$

$$-4 + 21 \geq 12 \checkmark$$

$$-2 - 7 < 3 \checkmark$$

$$(0, 5)$$

$$0 + 15 \geq 12 \checkmark$$

$$0 - 5 < 3 \checkmark$$