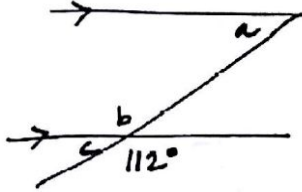


# FOM 11 – Flashback #1

Name: \_\_\_\_\_

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



$\angle b = 112^\circ$  VERT OPPOSITE  
 $\angle c = 68^\circ$  IS ON A LINE  
 $\angle a = 68^\circ$  corresponding angles.

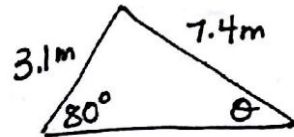
2. Determine the indicated angle given the following information.

$$3.1 \left( \frac{\sin 80^\circ}{7.4} \right) = \left( \frac{\sin \theta}{3.1} \right) 3.1$$

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

$$\sin^{-1}(\sin \theta) = \sin^{-1}(0.41255...)$$

$$\theta = 24^\circ$$



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

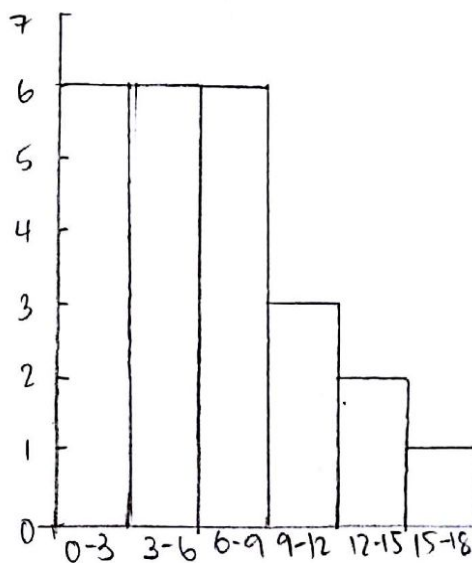
2	1	12	15	5
5	9	1	12	7
9	8	6	1	3
7	3	6	3	15
6	2	1	4	9

Range = max - min  
 $15 - 1$   
 $= 14$

# of intervals = 6

Interval frequency

0-3	6
3-6	6
6-9	6
9-12	3
12-15	2
15-18	1



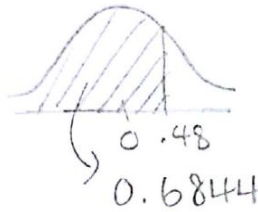
4. Given that  $\bar{x} = 59$  and  $\sigma = 6.2$ , if a person scored 62 on the test, what was their z-score? What percent of the scores are less than theirs?

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

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

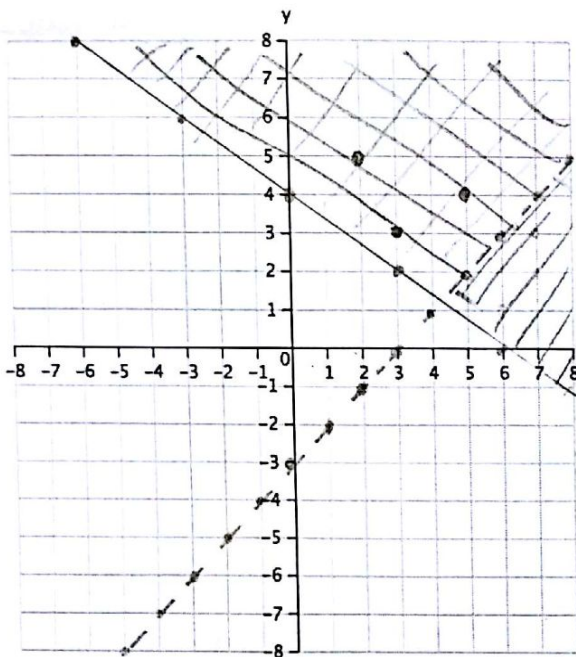
$$= \frac{3}{6.2}$$

$$z = 0.48$$



They did better than 68.44% of the class.

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



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

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

$$x - y < 3$$

$$x - 3 < y$$

$$y > x - 3$$

TEST PT (0,0)

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

$$0 \geq 12 \text{ False}$$

$$0 - 0 < 3$$

$$0 < 3 \text{ True}$$

Solutions (many are possible)

(2,5) (3,3) (5,4)

check

(2,5)

$$2(2) + 3(5) \geq 12$$

$$4 + 15 \geq 12$$

$$19 \geq 12 \checkmark$$

$$2 - 5 < 3$$

$$-3 < 3 \checkmark$$

(3,3)

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

$$6 + 9 \geq 12$$

$$15 \geq 12 \checkmark$$

$$3 - 3 < 3$$

$$0 < 3 \checkmark$$

(5,4)

$$2(5) + 3(4) \geq 12$$

$$10 + 12 \geq 12$$

$$22 \geq 12 \checkmark$$

$$5 - 4 < 3$$

$$1 < 3 \checkmark$$