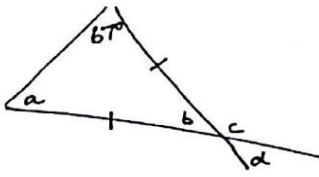


# FOM 11 – Flashback #2

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



$$\begin{aligned} \angle a &= 67^\circ \\ \angle b &= 46^\circ \\ \angle c &= 134^\circ \\ \angle d &= 46^\circ \end{aligned}$$

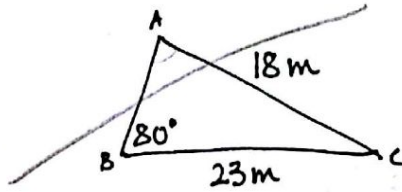
Isosceles  $\Delta$   
 $\angle$  sin a  $\Delta$   
 $\angle$  s on a line  
 vertically opposite

2. Solve the following triangle.

$$\frac{\sin A}{23} = \frac{\sin 80}{18}$$

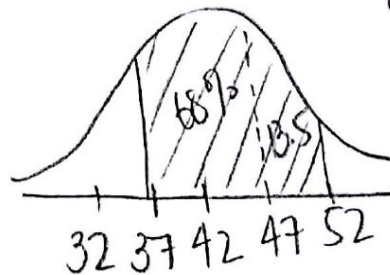
$$\sin A = \frac{23 \sin 80}{18}$$

OMIT



3. Which standard deviation is **more consistent**?  $\sigma_1 = 8.6$  or  $\sigma_2 = 14.3$ ? Explain how you know.  
 $\sigma_1$  is more consistent since it is the smaller value.  
 a smaller standard deviation means that the data is more consistent.

4. Draw a normal curve and label given that  $\bar{x} = 42$  and  $\sigma = 5$ . What percent of the data is between 37 and 52?



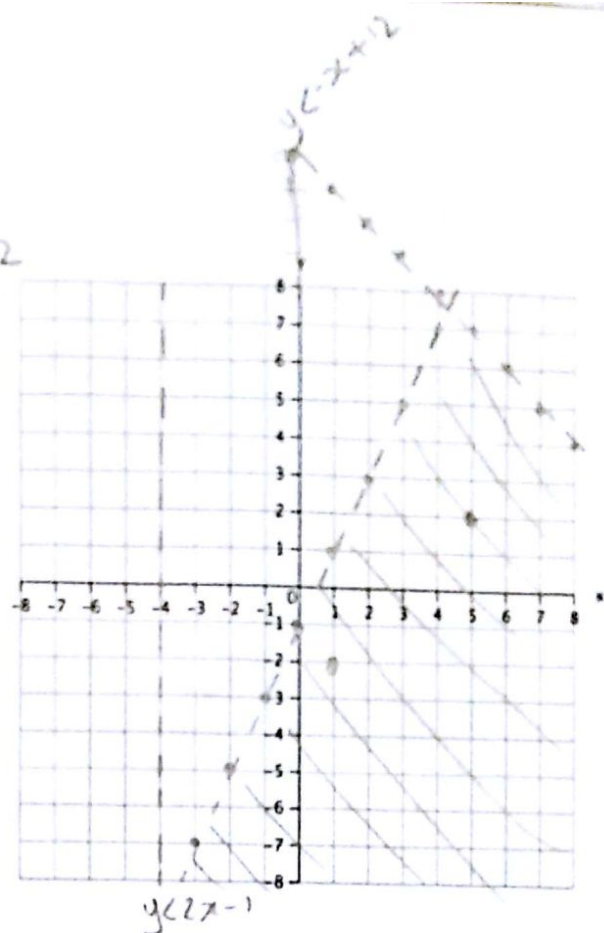
$$\begin{aligned} \% \text{ between } 37 \text{ \& } 52 \\ 68 + 13.5 \\ = 81.5\% \end{aligned}$$

5. Graph the system

$$\begin{aligned} x+y < 12 & \quad y < -x+12 \\ 2x-1 > y & \quad y < 2x-1 \\ 2y > -8 & \quad y > -4 \end{aligned}$$

TEST PT (0,0)

$$\begin{aligned} x+y < 12 & \quad 2x-1 > y \\ 0 < 12 \checkmark & \quad -1 > 0 \checkmark \\ 2y > -8 & \\ 0 > -8 \checkmark & \end{aligned}$$



Determine two different solutions from the graph. Verify algebraically.

(1, -2)

$$\begin{aligned} 1 + (-2) < 12 & \quad 2(-2) > -8 \\ -1 < 12 \checkmark & \quad -4 > -8 \checkmark \\ 2(1) - 1 > -2 & \\ 1 > -2 \checkmark & \end{aligned}$$

(5, 2)

$$\begin{aligned} 5 + 2 < 12 & \quad 2(2) > -8 \\ 7 < 12 \checkmark & \quad 4 > -8 \checkmark \\ 2(5) - 1 > 2 & \\ 9 > 2 \checkmark & \end{aligned}$$

6. Just by looking, tell me what you know about the graph of the following quadratic functions.

$y = 4x^2 + 3x - 5$

$a > 0$ , opens up  
 $y$  int  $-5$   
 $a = 4$ , so narrow parabola  
 must have 2 roots.  
 Why?  $y$  int of  $-5$  & opens up

$y = -3(x-4)(x+1)$

$a < 0$ , opens down  
 $x$  int @  $4, -1$   
 $x$ -coordinate of vertex =  $\frac{-4+1}{2} = -1.5$   
 $a = 3$ ; narrow

$y = -(x+6)^2 + 5$

$a < 0$ , opens down  
 vertex  $(-6, 5)$   
 2 roots. Why?

$V(-6, 5)$  & opens down.