# of times on a plan

# times on a plane	Frequency
0-5	4
6-10	5
11-20	2
21-30	1
31-40	1

10 22
10 2
10 15
4 0
7 8
10 4
3 4 14

Sample Types

Sample #1 - Random Sample

Every individual has the same chance of being chosen

A random number generator is used to identify which numbers of the population are chosen
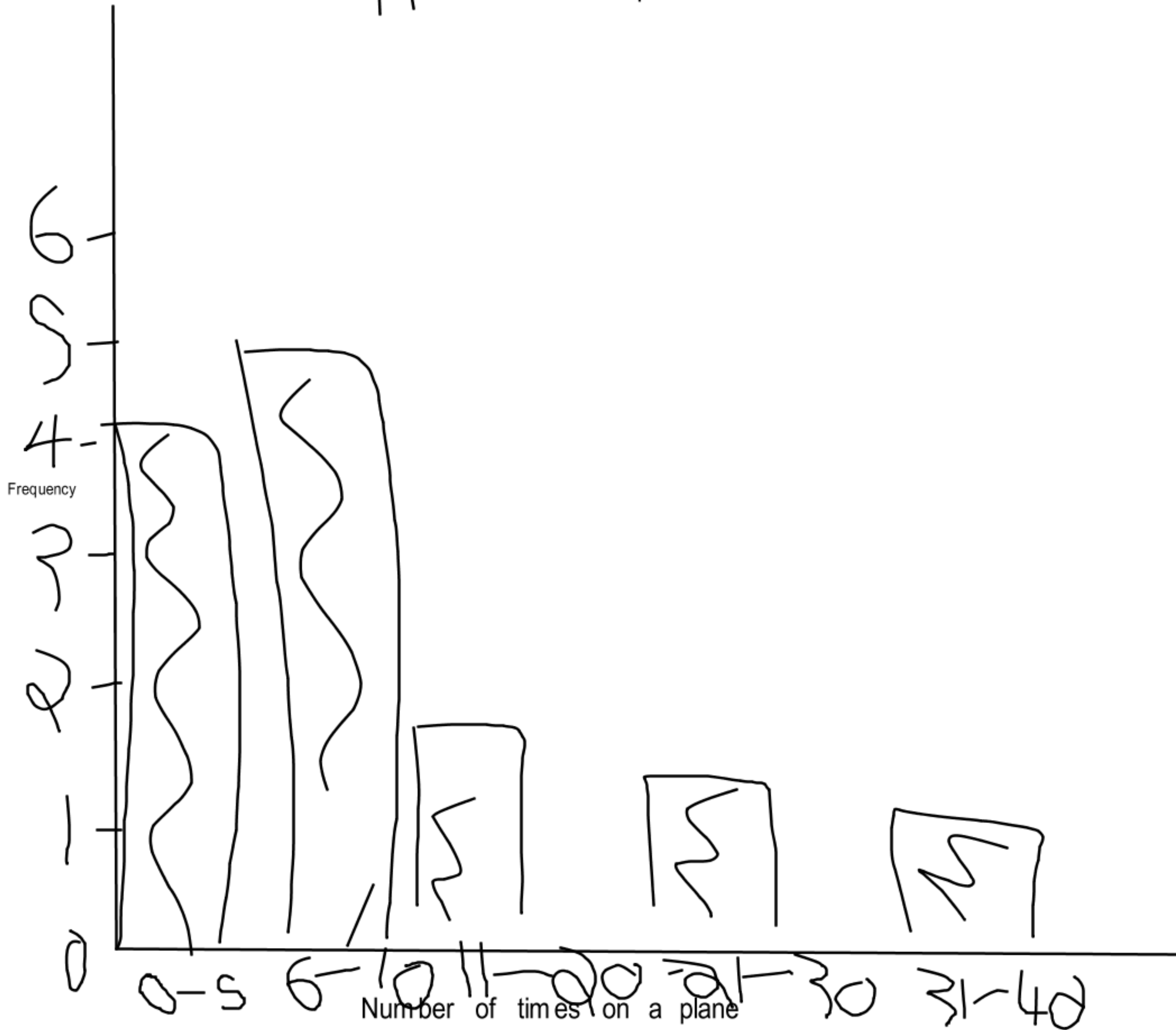
Sample #2 - Cluster Sample

Many people in few small regions are surveyed. The other regions are ignored. Example: A survey of all staff at 3 different Tims locations.

Sample #3 - Voluntary Response Sample

Sample group is not required, for the survey to be completed. It is their choice to complete the survey, such as a phone or email survey.

of times on a plane

Frequency

0-5 6-10 11-20 21-30 31-40

Number of times on a plane

Jason

$$\frac{4r^2}{4} + \frac{44r}{4} + \frac{112}{4}$$

$$4(r^2 + 11r + 28) \quad \begin{array}{l} \times\, 28 \\ +\, 11 \\ 7, 4 \end{array}$$

$$4(r+4)(r+7)$$

$$\underset{-4}{r+4} = 0 \quad \underset{-7}{r+7} = 0 \rightarrow \qquad SS = \{-4, -7\}$$

Difference Of Squares

$$\sqrt{x^2} - 64 = 0$$

$$(x + 8)(x - 8)$$

Decomposition

$$9b^2 - 12b + 4$$

$$= \left(9b^2 - 6b\right)\left(-6b + 4\right)$$

$$= \frac{}{} \frac{-6b}{-2} \frac{+4}{-2}$$

$$3b(3b-2) \quad -2(3b-2)$$

$$(3b-2)(3b-2)$$

$$(3b-2)^2$$

$\bigotimes \; +36$

$\boxplus \; -12$

$-6, -6$

Sine Law

A = 53°

C

B
55°   a/5

C = 72°
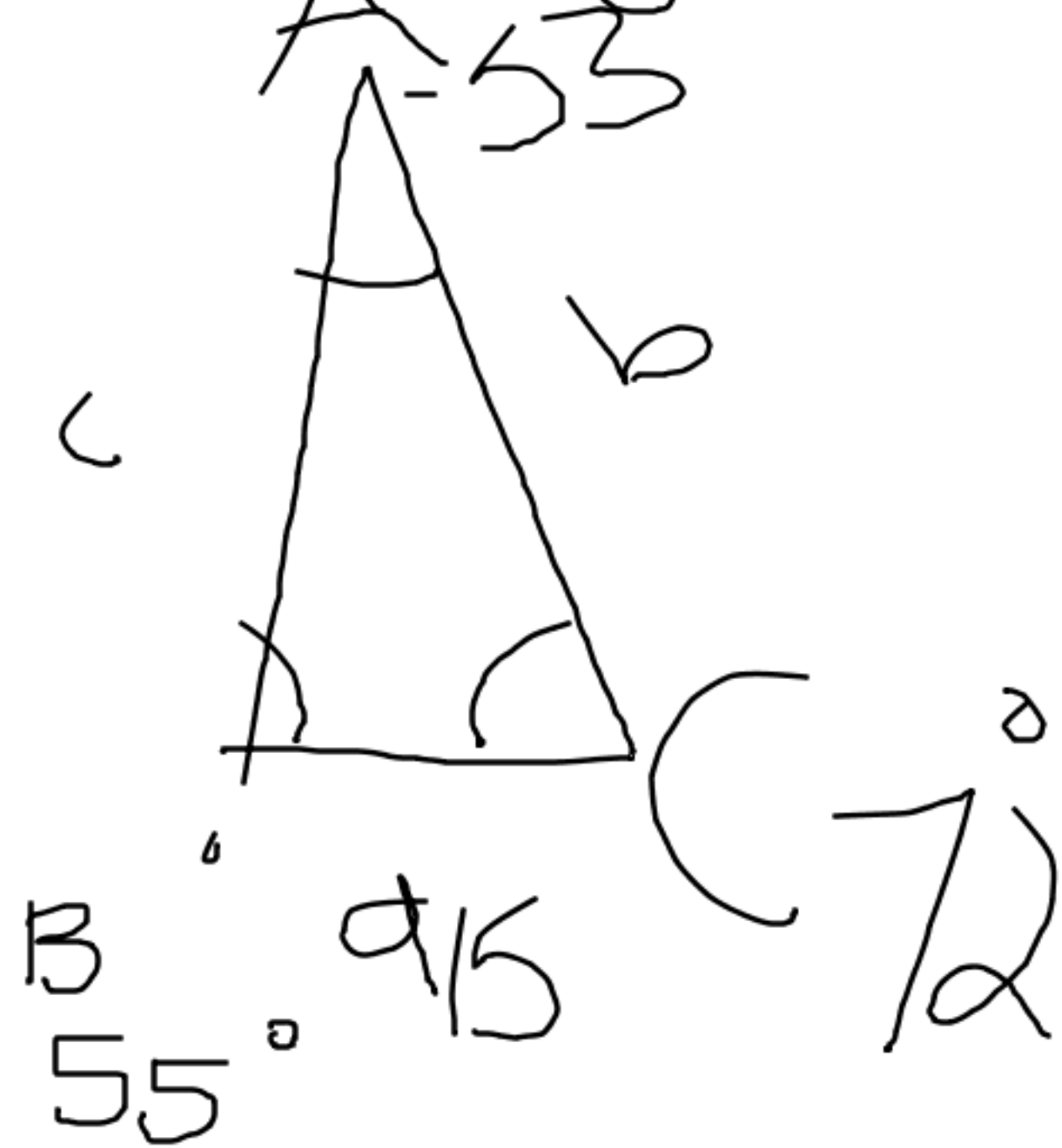
Faith

$A = 53°$ $a = 15$

$B = 55°$ $b = 15$

$C = 72°$ $c =$

$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

$$\frac{15}{\sin 53} = \frac{b}{\sin 55}$$

$b = 15.4 \times \sin 55$

$b = 15$

A $25°$

19

20

C ?

B? 14
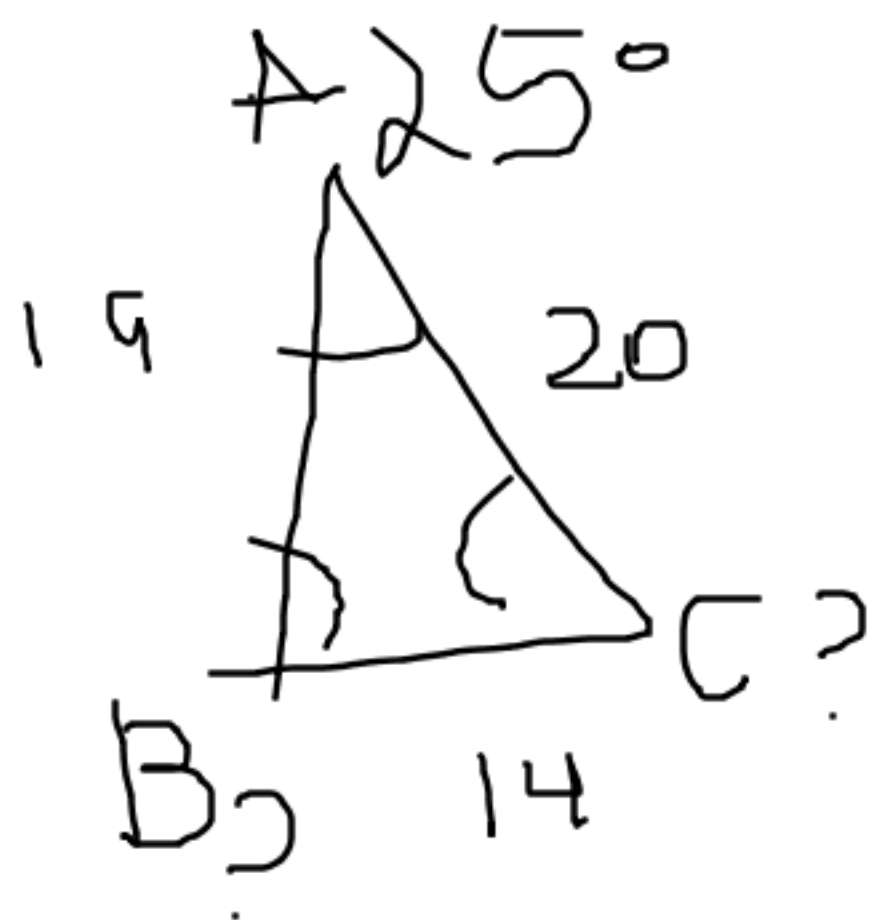
$A = 25°$

$B = 37°$

$C =$

$a = 14$

$b = 20$

$c = 19$

$$\frac{\sin A}{a} = \frac{\sin B}{b}$$

$20 \times \dfrac{\sin 25}{14} = \dfrac{\sin B}{20} \times 20$

$\sin^{-1} \sin B = 0.6037$ $\quad \sin^{-1} B = 37°$

$B = 37.135$