

1.

Turtle

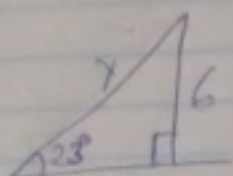
10,24,26

Solution

$$= 10^3, 24^3, 26^3$$

$$= 1000, 13824, 17576$$

2.



$$y = 15.36$$

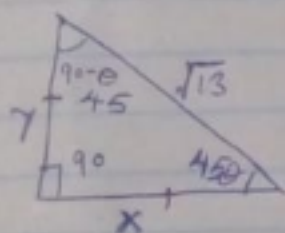
SOH CAH TOA

$$\sin 23 = \frac{6}{y}$$

$$y = \frac{6}{\sin 23}$$

$$= \underline{\underline{15.36}}$$

3.



SOH CAH TOA

$$\sin \theta = \frac{y}{\sqrt{13}}$$

$$\cos \theta = \frac{x}{\sqrt{13}}$$

x and y are equal
hence two other angles
are equal

$$(180 - 90) = 90$$

$$90 \div 2 = 45$$

Each other angles are
 45° each

$$\sin 45 = \frac{y}{\sqrt{13}}$$

$$y = \sqrt{13} \times \sin 45$$

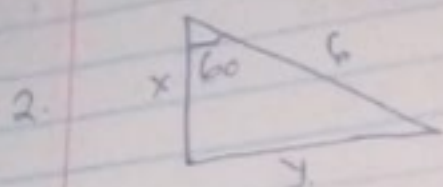
$$= 2.55$$

$$x = 2.55$$

$$\begin{aligned}
 1. \quad \cos \theta &= 0.2419 \\
 \cos \theta &= 0.2419 \\
 \theta &= \cos^{-1} 0.2419 \\
 &= 76.0013^\circ \\
 &= \underline{\underline{76^\circ}}
 \end{aligned}$$

$$x = 3$$

$$y = 5.196$$

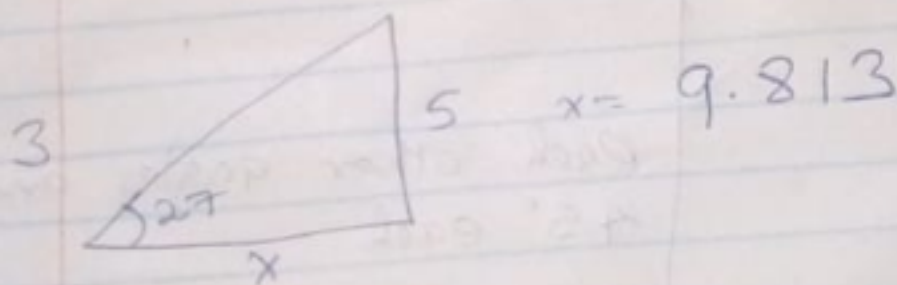


$$\sin 60 = \frac{y}{6}$$

$$\begin{aligned}
 y &= 6 \sin 60 \\
 &= 5.196
 \end{aligned}$$

$$\cos 60 = \frac{x}{6}$$

$$\begin{aligned}
 x &= 6 \cos 60 \\
 &= 3
 \end{aligned}$$



$$x = 9.813$$

$$\tan 27 = \frac{5}{x}$$

$$x = \frac{5}{\tan 27}$$

$$= \frac{5}{0.5095}$$

$$= \underline{\underline{9.813}}$$

$$A[-3, -2, -1] \quad B[-1, 0, 1] \quad C[1, 2, 3]$$

(1) $A \cap B$

This means the elements which are common in both A and B

$$A \cap B = -1 \\ = [-1]$$

(2) $B \cup C$

unites elements of B and C without repeating the same element

$$B \cup C = [-1, 0, 1, 2, 3]$$

(3) $(A \cup B) \cup C$

unites elements of A and B and C

$$[-3, -2, -1, 0, 1, 2, 3]$$