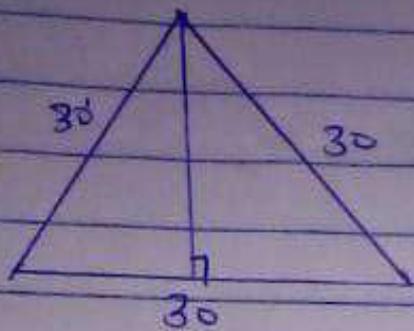


8



$$h^2 = 30^2 - 15^2$$

$$h = \sqrt{30^2 - 15^2}$$

$$= 25.98 \text{ cm}$$

$$\frac{1}{2} \times 30 \times 25.98$$

$$389.7 \text{ cm}^2$$

9

$$9^2 - 3^2 = 81 - 9 = 90$$

$$\sqrt{90} = 9.5 \text{ cm}$$

$$9.5^2 + 4^2 = \underline{98}$$

$$90 + 16$$

$$\underline{\underline{106}}$$

$$\underline{\underline{10.3 \text{ cm}}}$$

$$\tan \theta = \frac{46.9}{57.4}$$

$$\theta = 39^\circ$$

$$H = 90^\circ, L = 90^\circ, I = 50^\circ, J = 39^\circ \quad X = 57.4 \text{ cm}$$

7

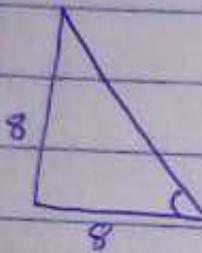
$$(a) \quad 8^2 + 8^2 = 64 + 64$$

$$\sqrt{128}$$

$$PR = 11.3 \text{ cm}$$

(b) Isoceles triangle

(c)



$$\tan \theta = \frac{8}{8}$$

$$\tan \theta = 1$$

$$\underline{45^\circ}$$

d



$$8^2 - 5.65^2 = \sqrt{32.0775}$$

$$5.66$$

$$5.7 \text{ cm}$$

e

$$RS = \frac{1}{2} RP$$

$$= \frac{1}{2} (11.3)$$

$$= 5.7 \text{ cm}$$

f

Isoceles Triangle

$$A^2 + B^2 = c^2$$

$$(a) \quad 69.3^2 + 47.6^2 = c^2$$

$$4802.49 + 2265.76$$

$$= 7068.25$$

$$84.07$$

$$84.1 \text{ cm}$$

b)

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$3.3 \times \tan 62 = \text{opp}$$

$$6.2 \text{ cm}$$

$$\cos 62 = \frac{3.3}{\text{hyp}}$$

$$\text{hyp} = \frac{3.3}{\cos 62}$$

$$7.1 \text{ cm}$$

(d) $H = 90^\circ$
 $L = 90^\circ$

$$\cos \theta = \frac{68.4}{89.5}$$

$$\theta = 49.84^\circ = 50^\circ$$

$$\tan 49.84 = \frac{68.4}{\text{adj}}$$

$$\tan 50^\circ = \frac{68.4}{\text{adj}}$$

$$\text{adj} = \frac{68.4}{\tan 49.84}$$

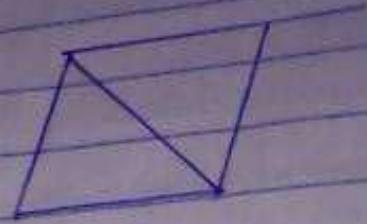
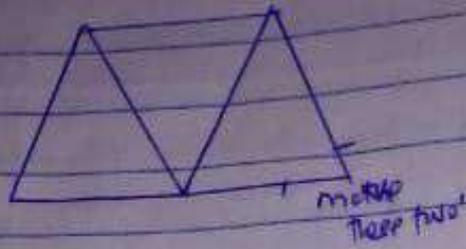
$$\text{adj} = \frac{68.4}{\tan 50}$$

$$= 57.7$$

$$r = 57.4 \text{ cm}$$

5.1

Q 1



(2) (b)

A - A triangle can be right angled and at the same time Scalene

3

B Base angles of an isosceles triangle are congruent

4 C Legs of all right triangles are perpendicular

5

$$\begin{aligned} (a) \quad 180 - (50 + 47) \\ 180 - 97 \\ = 83^\circ \end{aligned}$$

(b)

$$\begin{aligned} 15 + 15 &= 30 \\ 180 - 30 &= 150^\circ \\ 150^\circ, 15^\circ \end{aligned}$$

(c)

$$\begin{aligned} 180 - 60 &= 120 \\ 120 \div 2 &= 60 \\ 60^\circ, 60^\circ \end{aligned}$$