14) $\hat{A} = 35.2^\circ$, adj (AB) $= 10$cm, opp (BC) $= x$ cm

$$\tan(\hat{A}) = \frac{opp}{adj}$$

$$\frac{x}{10} = \tan 35.2^\circ$$

$$\frac{x}{10} = 0.70542$$

$$x = 0.70542 \times 10$$

$$x = 7.0542$$

$$BC = 7.05 \text{ cm}$$

16) $\hat{A} = 21.3^\circ$, adj (AB) $= 16$cm, opp (BC) $= x$ cm

$$\tan(\hat{A}) = \frac{opp}{adj}$$

$$\frac{x}{16} = \tan 21.3^\circ$$

$$\frac{x}{16} = 0.38988$$

$$x = 0.38988 \times 16$$

$$x = 6.23808$$

$$BC = 6.24 \text{ cm}$$

20) $\hat{A} = 23^\circ$, adj (AC) $= 24$cm, opp (BC) $= x$ cm

$$\tan(\hat{A}) = \frac{opp}{adj}$$

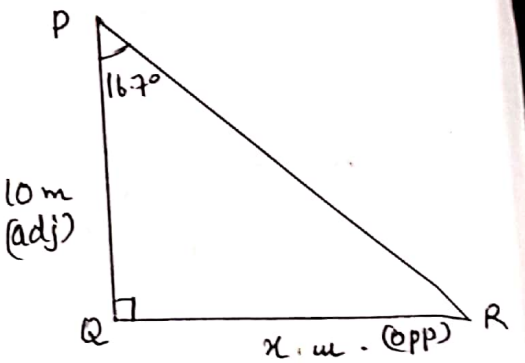
$$\frac{x}{24} = \tan 23^\circ$$

$$\frac{x}{24} = 0.42447$$

$$x = 10.18728$$

$$BC = 10.2 \text{ cm}$$

22)



$\hat{P} = 16.7^\circ$, adj (PQ) $= 10$ m, opp (QR) $= x$ m

$$\tan(\hat{P}) = \frac{opp}{adj}$$

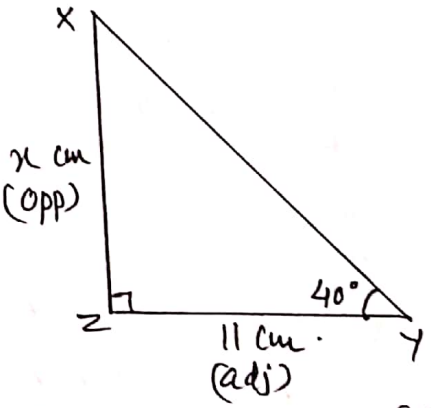
$$\frac{x}{10} = \tan(16.7^\circ)$$

$$\frac{x}{10} = 0.300014377$$

$$x = 3.00014377$$

$$QR = 3.00 \text{m}$$

24)



$\hat{Y} = 40^\circ$, adj (ZY) $= 11$cm, opp (XZ) $= x$ cm

$$\tan(\hat{Y}) = \frac{opp}{adj}$$

$$\frac{x}{11} = \tan 40^\circ$$

$$\frac{x}{11} = 0.839099631$$

$$x = 9.230095943$$

$$XZ = 9.23 \text{ cm}$$