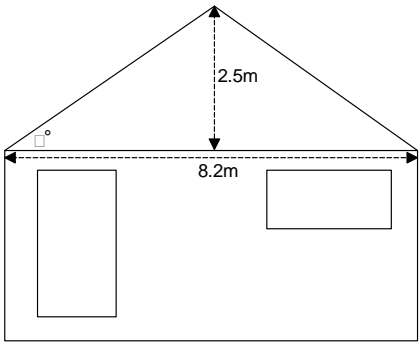
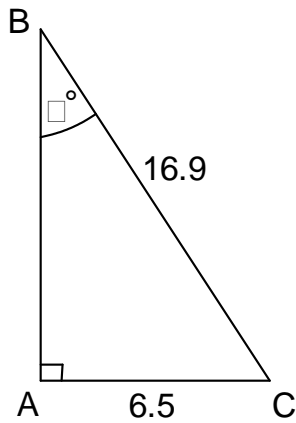


9. Calculate the pitch of this roof. (Assuming symmetry)

| | |
|---|---|
|  | <p>This is an isosceles triangle. Half the large triangle is a right angled triangle.</p> $\tan\theta^\circ = \frac{opp}{adj}$ $\tan\theta^\circ = \frac{2.5}{4.1}$ $\tan\theta^\circ = 0.6098$ $\theta^\circ = 31.4^\circ \text{ or } 31^\circ 22' 23''$ |
|---|---|

10. In $\triangle ABC$: $\angle A = 90^\circ$, $a = 16.9$, $b = 6.5$, calculate $\angle B$.

The first step is to draw the diagram to match the information given.



$$\sin\theta^\circ = \frac{opp}{hyp}$$

$$\sin\theta^\circ = \frac{6.5}{16.9}$$

$$\sin\theta^\circ = 0.3846$$

$$\angle B = \theta^\circ = 22.62^\circ \text{ or } 22^\circ 37' 12''$$