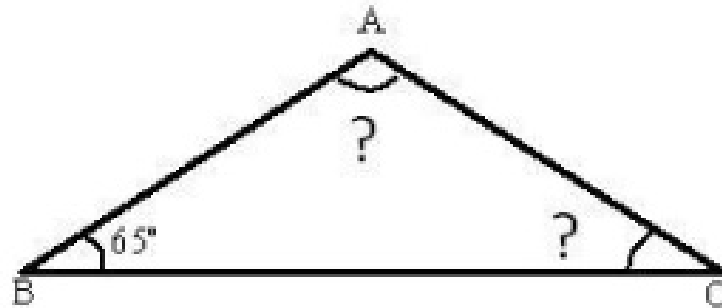




Exercise 5A

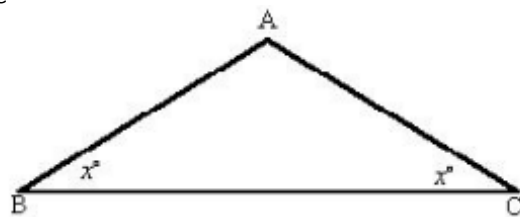
Question 3:



In $\triangle ABC$, if $AB = AC$
 $\Rightarrow \triangle ABC$ is an isosceles triangle
 \Rightarrow Base angles are equal
 $\Rightarrow \angle B = \angle C$
 $\Rightarrow \angle C = 65^\circ$ [Since $\angle B = 65^\circ$]

Also by angle sum property, we have
 $\angle A + \angle B + \angle C = 180^\circ$
 $\Rightarrow \angle A + 65^\circ + 65^\circ = 180^\circ$ [$\angle B = \angle C = 65^\circ$]
 $\Rightarrow \angle A = 180^\circ - 130^\circ = 50^\circ$

Question 4:



Let ABC be an isosceles triangle in which $AB = AC$.

Then we have $\angle B = \angle C$

Let $\angle B = \angle C = x$

Then vertex angle $A = 2(x+x) = 4x$

Now, $x + x + 4x = 180$

$\Rightarrow 6x = 180$

$\Rightarrow x = \frac{180}{6} = 30$

\therefore Vertex $\angle A = 4 \times 30 = 120^\circ$

And, $\angle B = \angle C = 30^\circ$.

***** END *****

