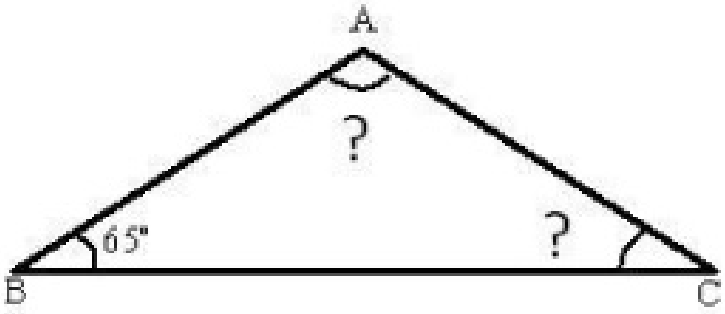
Exercise 5A

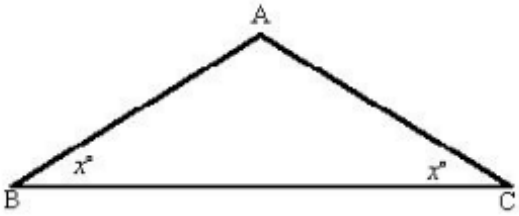
Question 3:



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

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

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 $\angle A = 4 \times 30 = 120^0$
And, $\angle B = \angle C = 30^0$.

********** END **********