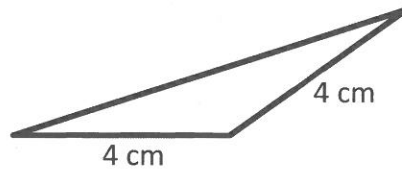
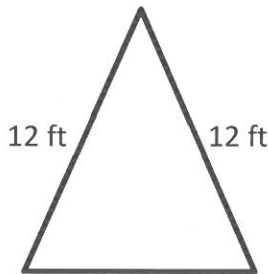


Isosceles Triangle

An *isosceles triangle* (pronounced 'EYE-SAUCE-EL-EES') has two sides that are of equal length and one side that is a different length. The triangles shown below are all examples of an isosceles triangle.



Since two of the sides of an isosceles triangle are of equal length, the angles OPPOSITE the equal sides have equal measures. This is demonstrated in the example below.

Isosceles Triangle Example 1

In the isosceles triangle shown below, find the sizes of the angles labelled B and C.



Since the two sides marked with 'hashmarks' are equal, angles B and C must also be equal.

$$180^\circ - 110^\circ = 70^\circ$$

$$70^\circ \div 2 = 35^\circ$$

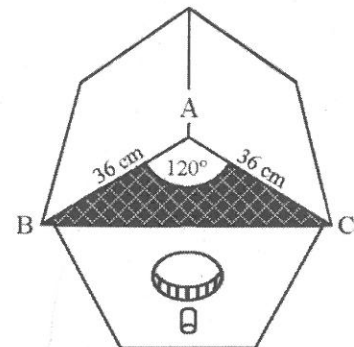
Isosceles Triangle Example 2

OLD EXAM QUESTION ALERT!!! This question comes from the June 2017 Provincial Exam.

A community group is building bird houses.

- a) State the type of triangle that is shaded in the diagram.

Since two sides are the same length, it is an isosceles triangle.



- b) State the measure of $\angle C$ in the triangle ABC.

$$180^\circ - 120^\circ = 60^\circ$$

$$60^\circ \div 2 = 30^\circ$$