



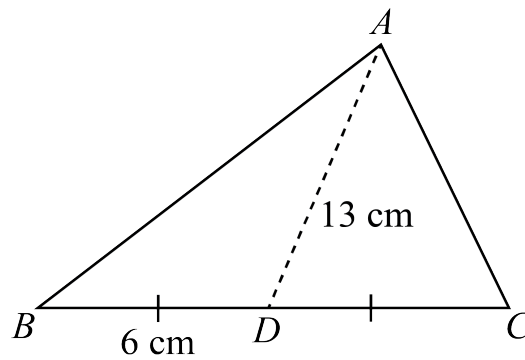
## Problem of the Week

### Problem D

#### There are Two Sides

A *median* is a line segment drawn from the vertex of a triangle to the midpoint of the opposite side.

In  $\triangle ABC$ , a median is drawn from vertex  $A$ , meeting side  $BC$  at point  $D$ . The length of  $BD$  is 6 cm and the length of the median  $AD$  is 13 cm.



The area of  $\triangle ABC$  is  $72 \text{ cm}^2$ . Determine the lengths of sides  $AB$  and  $AC$ .

