



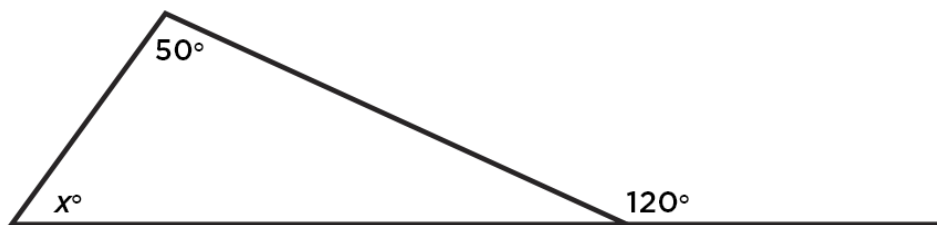
# AUSTRALIAN MATHS TRUST

AMC Challenge  
Junior: Years 7–8  
Practice Problem

## J1: Triangles

### Solutions

In the diagram the value of  $x$  is



- a. 80      b. 70      c. 60      d. 50      e. 40

#### Alternative 1.

The three interior angles of the triangle are  $x^\circ$ ,  $50^\circ$  and  $60^\circ$ .  
These add to  $180^\circ$ , so  $x + 110 = 180$  and  $x = 70$ ,  
Hence (b).

#### Alternative 2.

Using the exterior angle formula,  $x + 50 = 120$ , so that  $x = 70$ ,  
Hence (b).