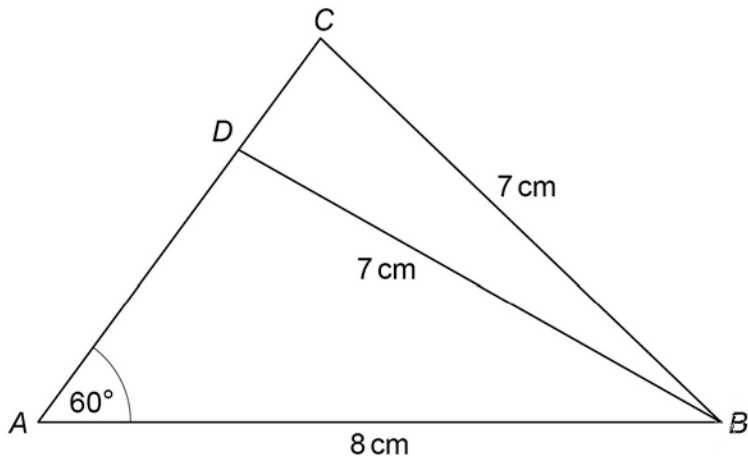


5 ABC is a triangle. The point D lies on AC .

$AB = 8$ cm, $BC = BD = 7$ cm and angle $A = 60^\circ$ as shown in the diagram.



5 (a) Using the cosine rule, find the length of AC .

[3 marks]

5 (b) Hence, state the length of AD .

[1 mark]