



Learner assessment · Trigonometry in right triangles

GCSE Mathematics 1MA1 · L039 · 60 minutes

Total: 20 marks. Suggested time: 18 minutes. Questions are labelled NC/C.

1. For $\theta=40^\circ$ and hypotenuse 12 cm, find the opposite side to 1 d.p. [C] [3 marks]

2. For $\theta=52^\circ$ and adjacent side 9 cm, find the hypotenuse to 1 d.p. [C] [4 marks]

3. Opposite=8 cm, adjacent=15 cm. Find θ to 1 d.p. [C] [4 marks]

4. A 7 m ladder makes 65° with the ground. Find the vertical height reached to 2 d.p. [C] [3 marks]

5. A tree casts a 14 m shadow when the angle of elevation to the top is 38° . Find the tree height to 1 d.p. [C] [4 marks]

6. Explain why the labels opposite and adjacent can change when a different acute angle is chosen.

[NC] [2 marks]
