Finding a side

6 questions | 12 marks

Equivalent correct methods earn the corresponding marks.

1. Find opposite if h = 14 cm and θ = 28°. Give two decimal places. [2 marks]

$o = 14\sin 28^\circ$.

Evaluate in degrees and round the final length.

Answer: 6.57 cm

2. Find adjacent if h = 18 m and θ = 57°. Give two decimal places. [2 marks]

$a = 18\cos 57^\circ$.

The result is shorter than 18 m.

Answer: 9.80 m

3. Find opposite if a = 11 cm and θ = 35°. Give two decimal places. [2 marks]

$o = 11\tan 35^\circ$.

Answer: 7.70 cm

4. Find adjacent if o = 8 m and θ = 41°. Give two decimal places. [2 marks]

$\tan 41^\circ = 8/a$.

$a = 8/\tan 41^\circ$.

Answer: 9.20 m

5. Find hypotenuse if a = 12 cm and θ = 27°. Give two decimal places. [2 marks]

$\cos 27^\circ = 12/h$.

$h = 12/\cos 27^\circ$.

Answer: 13.47 cm

6. Find hypotenuse if o = 9 m and θ = 63°. Give two decimal places. [2 marks]

$\sin 63^\circ = 9/h$.

$h = 9/\sin 63^\circ$.

Answer: 10.10 m