Practice worksheet | Pythagoras and Trigonometry

Elevation/depression

Name: _____ Date: _____

6 questions | 15 marks

1. From level ground 30 m away, roof elevation is 40°. Find its height to 0.1 m. [2 marks]

2. A tree top is 25 m above an observer sight line, at elevation 50°. Find horizontal distance to 0.1 m. [2 marks]

3. An observer is 16 m from a 12 m wall. Their eye is 1.6 m high. Find elevation to the top to 0.1°. [3 marks]

4. A cliff top is 40 m above sea level. Depression to a boat is 25°. Find the horizontal distance to 0.1 m. [3 marks]

5. A line of sight makes 38° with a vertical wall. Find its angle with the horizontal. [2 marks]

6. A camera 1.2 m high is 15 m from a flagpole. Top elevation is 55°. Find total pole height to 0.1 m. [3 marks]