

Trigonometry. Unit 1. Assignment 1.

Please show ALL work and diagrams for full marks.

1. From the top of a lighthouse 55 m above the water the angle of depression of a ship is 3.8° .

Find the distance from the base of the lighthouse to the ship.

[6 marks]

2. A ramp for servicing cars has an incline that leads to a flat area where the tires rest. The part where the tires rest is 50 cm high. The horizontal distance from where the ramp meets the ground to the start of the resting area is 1.2 m. Determine the angle of inclination (elevation) of the ramp.

[6 marks]