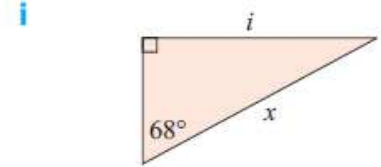
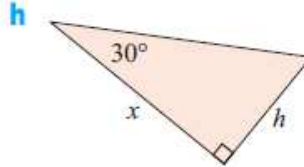
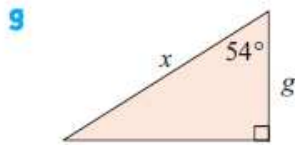
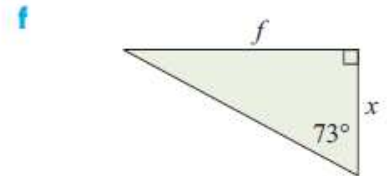
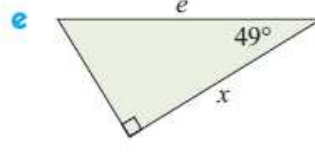
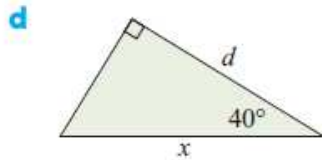
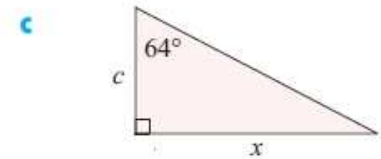
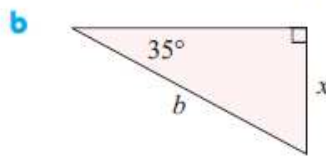
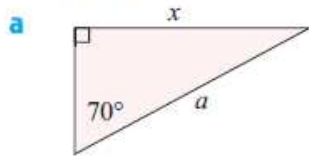
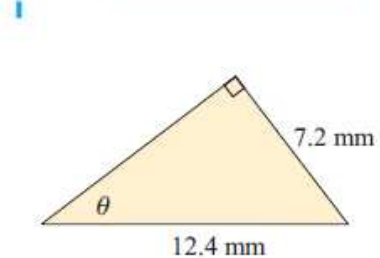
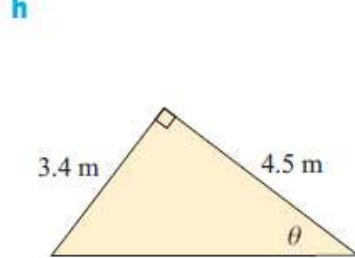
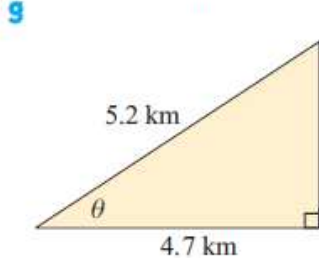
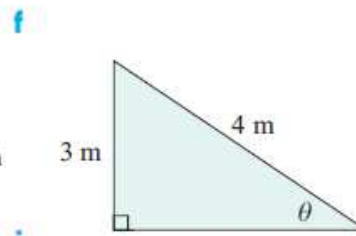
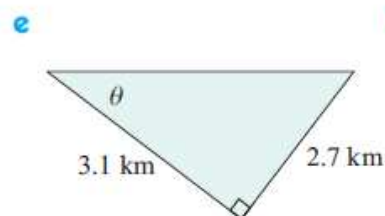
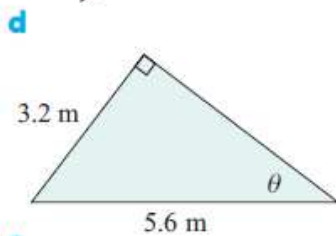
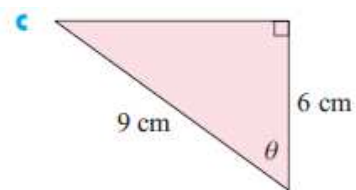
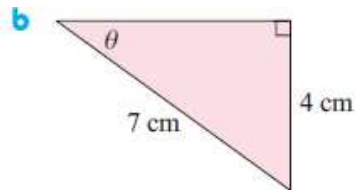
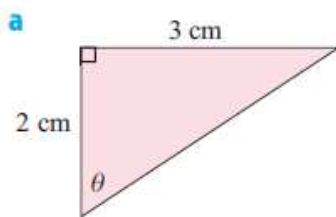


Trigonometry Question Bank

D) Set up a trigonometric equation connecting the angle and the sides given:



II) Find, to one decimal place, the measure of the angle marked μ in:



Application Sums:

- 1) Find the height of a vertical cliff if the angle of elevation is 25° to the top from a point which is 235 m from the base of the cliff.
- 2) What angle will a 5 m ladder make with a wall if it reaches 4.2 m up the wall?
- 3) The angle of elevation to the top of a lighthouse 25 m above sea-level from a fishing boat is 6° . Calculate the horizontal distance of the boat from the lighthouse.
- 4) The angle of elevation from point A on horizontal ground to the top of a 20 m high pole is 35° . A rope is attached from A to the top of the pole. Find the length of the rope.
- 5) A rectangular gate has a diagonal strut of length 3 m and an angle between the diagonal and a side is 28° . Find the length of the longer side of the gate.
- 6) From a vertical cliff 80 m above sea level a fishing boat is observed at an angle of depression of 6° . How far out to sea is the boat?
- 7) A railway line goes up an incline of constant angle 4° over a horizontal distance of 4 km. How high is it above the horizontal at the end of the incline?
- 8) At the entrance to a building there is a ramp for wheel chair access. The length of the ramp is 5 metres, and it rises to a height of 0.6 metres. Find the angle μ that the ramp makes with the ground.
- 9) The roof of a bus shelter is supported by a metal strut 2.5 m in length, attached to the back wall of the shelter at an angle of 40° . Calculate how far below the roof of the shelter the strut is attached to the wall.
- 10) A goal post which has snapped in two after being hit by lightning. The top of the post is now resting 15 m from its base at an angle of 25° . Find the height of the goal post before it snapped.