

Name: _____

Give all answers correct to one decimal place

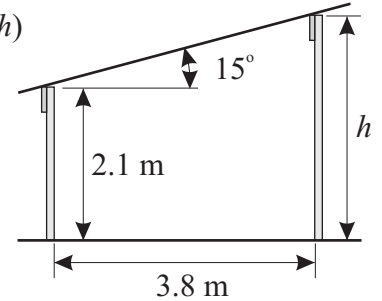
1. A yacht sails 27.8 km in a direction of S 48° W from a marina.
(a) How far south of the marina is the yacht?

- (b) How far west of the marina is the yacht?

2. A hot air balloon floats 26 km in a direction of S $32^\circ 28'$ E from base then 18 km in a direction S $18^\circ 54'$ W.
(a) How far south of the base is the balloon?

- (b) How far east or west of the base is the balloon?

3. Find the height (h) of the wall in the carport shown here.



4. James, a photographer, is observing a weather balloon as it ascends. He is standing 150 metres away from the point where the balloon was released. He takes a photo of the balloon with his camera set at an angle of 15° to the horizontal and 10 seconds later at an angle of 27° to the horizontal. At what speed is the balloon rising? Give answer in m/sec correct to one decimal place.