

Worksheet 9

- 1) You are sitting on the beach of a deserted island. 15 km away from you is a small sailing yacht with a mast height of 15 m. On a clear day, can you see the tip of the yacht's mast?
(Note: The earth's radius is 6371 km)

- 2) You're the captain of a small boat navigating a narrow passage between land and a dangerous reef that runs parallel to it at a distance of 800 m. You triangulate your position between two light houses that are 1000 m apart, and obtain bearings as shown in the sketch below. How far away from the reef are you?

