## **Quiz: Field of View**

Introduction to Mobile Robotics > Field of View Exploration

1. Describe or sketch the general shape of the area that the Ultrasonic Sensor can detect.

- 2. Answer the following questions.
  - a. What is scale (size ratio)?
  - b. If a graph on a sheet of paper has lines 1cm apart, and the lines are labeled in increments of 1m, what is the size ratio of the graph?

**3.** Sound travels at 340m/s at sea level. Ricky's Ultrasonic Sensor detects an object 42cm away. How long did the sound wave take to travel from the Ultrasonic Sensor to the object and back? Show your work.

DATE

