Module 2: Questions

- 1. What is the farther distance the JetBot sonar module can measure?
- 2. Tablets and cellphones can detect whether they are being used in a portrait or landscape orientation. What sensor is used to detect this?
- 3. What does a gyroscope measure?
- 4. The JetBot encoders can detect 3200 ticks per revolution. If a wheel has moved 1000 ticks forward and the JetBot has 6" wheels. How many inches has the robot moved forward?
- 5. Explain why the motors cannot be directly connected to the Jetson TK1.
- 6. How do you read the encoder values?
- 7. Describe the reason for the 6-pin connector on the JetBot motors.
- 8. Describe the reason for the 4-pin connector on the sonar module.
- 9. You would like to measure how bumpy or smooth the ground is that the JetBot is running on. What sensor would be best suited for this?
- 10. What is gyroscope drift?