- 1. Name the two sensors that should be used in Project Iteration two
- 2. (True/False) Without ALMANAC data, GPS takes at least five minutes to get a lock
- 3. What is the factor that influences GPS accuracy the most?
- 4. Google have been using a dual naming/numbering system for their Android OS, what goes with 4.0 and 4.1?
- 5. What is the main difference between Xubuntu and Ubuntu Oss?
- 6. The Netbooks have a GPS in them, but why is it better to use Android \$\&\phi\$ s GPS?
- 7. In the beginning of this class there was a brief specs comparison between Nexus S and Nexus 7, what is the price and how many processor cores does each have?
- 8. In order to start developing Android apps there is a kit that should be installed. What is the name of that kit?
- 9. How many GPS satellites are needed to determine one so position?
- 10. What level grade was the robot in Project Iteration one supposed to overcome?
- a. 30%
- b. 20%
- c. 10%
- d. 15%
- e. 5%
- 1. What was the first satellite navigation system called and who was it used by?
- 2. How many satellites must be visiable to obtain an accurate result in GPS operations?
 - a. 1
 - b. 4
 - c. 2
 - d. 6
- 3. The Wi-Fi Alliance defines Wi-Fi as any wireless local area network that is based on what standard?
- 4. (True/False) The two channels that are used for Wi-Fi in the United States is 2.4 GHz and 5 GHz.
- 5. Android is based on what operating system?
 - a. Windows
 - b. Linux
 - c. MAC
- 6. When was Linux initially released?
- 7. Each satallite continually transmits messages to a GPS receiver, what do these messages include?
- 8. (True/False) Android is programmed in just C.
- 9. What is the range (indoor and outdoor) of a Wi-Fi network with a typical wireless access point?
- 10. What are the three major segments that GPS consists of?
 - 0. What is IEEE 802.11?
- 1. Without an almanac, how long does it take to get a fix on the GPS satellites
- 2. What type of microcontroller system does the VEX use (This is probably the worst possible way to phrase this....)?
- 3. What is the difference between a servo motor and a drive motor?
- 4. Why should you not use a servo to drive the wheels?
- 5. Which Mythbuster has worked with VEX?
- 6. What does "Rooting" your phone actually mean?
- 7. What does PWM stand for?
- 8. And what is it (PWM) used for with VEX?
- 9. What does CDMA stand for?
- 1. What is an embedded system?
- 2. Name five protocols of 802.11 and two common frequency bands.
- 3. Why do we use a different compiler than the common gcc compiler for programming the Vex?
- 4. What is the difference between the L1 and L2 frequency transmitted from a typical Satellite Vehicle?
- 5. When will robots take over the world? And how will they do it?
- 6. What are some advantages and disadvantages of the PIC micro-controller architecture?
- 7. What is the latest version of the Android OS and a major improvement it has from previous versions?
- 8. What Linux distribution is Ubuntu based on? What does the word mean?
- 9. What is a USART?
- 10. What is the difference between the vex optical and an ultrasonic sensor?

What is the highest bit rate that the Vex can communicate through the serial port?

What is SDCC an acronym for in relation to Vex programming?

What is the instruction and switch for programming the Vex under Linux?

What is the latest version of the Android operating system?

What is IEEE standard number for Wi-Fi protocols?

What does USART stand for?

What statement is used to make a Vex program run continuous?

What kind of processor does the Vex use?

What networking port is most often used for hypertext transfer protocol?

How many motor ports does the Vex have?1. What does Baud rate refer to?

- 2. What is the formula for Total Risk?
 - a. Total Risk = Points(%)/(Time(hours)*Risk)
 - b. Total Risk = Time(hours)/(Risk*Points(%))
 - c. Total Risk = Risk*Points(%)/Time(hours)
- 3. (True/False) The Vex Controller hardware is synchronous.
- 4. Why might allowing interrupts cause problems?
- 5. What is sdcc?
- 6. What hardware does the netbook use to communicate to the Vex?
- 7. What is the PIC18F8520?
- 8. What (command) must be done at the beginning of the Vex program?
 - a. autonomous mode init()
 - b. controller init()
 - c. robot init()
- 9. There are two types of wireless networks. What are they?
- 10. What is the easiest way to disable a robot?