

Technician Class Course: Homework 4

Directions:

1. Read the book pages specified and fill in the answers to the questions below.
2. While reading also **highlight** the correct answer to each FCC test question and Gordon's keywords (in blue) in the explanation. **Do not read the incorrect answers!**
3. For your license, please acquire a FCC Registration Number (FRN) from the FCC website. Please read <http://www.fcc.gov/help/getting-fcc-registration-number-frn-universal-licensing-system-uls> for more information.

FRN: _____

4. Go to <http://www.qrz.com/hamtest/> and take three practice Technician tests.

Score 1: _____ Score 2: _____ Score 3: _____

5. Watch the following vidoes on Youtube:
http://www.youtube.com/watch?v=2A_h2AjJaMw

Brief summary: _____

<http://www.youtube.com/watch?v=8xONZcBJh5A>

Brief summary: _____

VOLTS & AMPS (Pages 136-150) – part 2

1. The unit of resistance is the ohm, represented by which letter? _____
2. Draw the Ohm's Law magic circle. _____
3. Page 136 make it easy to compute Ohm's Law, right? _____
4. The unit of power is the watt. Which letter represents power? _____
5. Draw the magic circle, easy as P I E _____
6. How many volts in a kilovolt? _____

ANTENNAS (Pages 151-165)

1. What is the relative performance of a handheld's rubber duck antenna? _____
2. When communicating through a repeater, keep you antenna straight _____.
3. How long is a $\frac{1}{4}$ wavelength 2 meter antenna? _____ inches
4. What do they call a $\frac{1}{2}$ wave antenna horizontal to the earth? _____
5. What do they call an antenna that beams energy in one general direction? _____
6. What is the impedance of ham coax cable? _____

7. Is an SWR reading 3:1 good or bad _____
8. What type of antenna purposely does not radiate a signal? _____

YOUR SAFETY (Pages 166-177)

1. Voltage above what level is considered dangerous? _____
2. The green wire in a three wire house plug connects to where? _____
3. What value fuse would you use to replace a blown 5 amp fuse? _____
4. Watch out for this when putting up any antenna? _____
5. Make sure your radio station is well _____
6. Wear these when working on the ground with someone up a tower above you _____.
7. What will concentrated radio waves do to the body at microwave frequencies? _____
8. If you touch a transmitting antenna, you could get _____?
9. What is the maximum power level above 30 MHz before you need to conduct a formal RF exposure evaluation? _____
10. The greater the transmit, the _____ radiation exposure.

GETTING READY FOR THE TEST (Pages 178-187)

1. How many examiners, minimum, comprise an accredited test team? _____
2. Bring identification. Also bring a cash test fee of \$ _____
3. Could the test questions be reworded from what is in the book? _____
4. What FCC form will you fill out? _____
5. When can you go on the air after passing the test? _____
6. Draw a picture of your face when your examiners say you have passed your entry level exam: