

**Reading Hospital School of Health Sciences
Medical Imaging Program**

MI132 – Imaging Principles and Equipment
Transformer Law Math Problems
2022-2023

1. A transformer is supplied with an AC of 110 V. If the primary coil has 100 turns and the secondary has 1,000 turns, what is the voltage in the secondary coil?
2. What is the secondary voltage in a transformer that has 200 turns in the primary coil and 300 in the secondary coil, and the primary is supplied with 220 volts?
3. A transformer is supplied with an AC of 5 A. If the primary coil has 100 turns and the secondary has 1,000 turns, what is the current in the secondary coil?
4. What is the secondary current in a transformer that has 200 turns in the primary coil and 300 in the secondary coil, when the current in the primary is 5 A?