

Mike Holt's

JOURNEYMAN PRACTICE EXAM

Suitable for all electrical exams based on the NEC® such as:
AMP, ICC, Local/State Examining Boards, Pearson VUE, Prometric, ProV, PSI

Theory • Code • Calculations

Based on the 2017 NEC®



Mike Holt Enterprises

888.NEC.CODE (632.2633) • www.MikeHolt.com

PART 1

ELECTRICAL THEORY EXAM (4 HOURS)

The questions for this exam are extracted from *Mike Holt's Illustrated Guide to Basic Electrical Theory* textbook.



CHAPTER 1— ELECTRICAL FUNDAMENTALS

UNIT 1—MATTER

1. Providing a path to the earth often helps reduce electrostatic charge.
(a) True
(b) False
2. Lightning frequently terminates to a point of elevation and strikes nonmetallic as well as metallic objects with the same frequency.
(a) True
(b) False
3. The termination of the lightning stroke is unlikely to ignite combustible materials.
(a) True
(b) False
4. Lightning protection is intended to protect the building itself, as well as the electrical equipment on or inside the structure.
(a) True
(b) False

UNIT 3—MAGNETISM

5. Nonmagnetic metals are ferrous, meaning they do not contain any iron, and cannot be magnetized.
(a) True
(b) False
6. Magnetic lines of force can cross each other and they are called flux lines.
(a) True
(b) False

UNIT 4—ELECTRICITY

7. It is not the force of the magnetic field through a conductor that produces electricity; it is the relative motion of the field to the electrons within the conductor that produces the movement of electrons.
(a) True
(b) False
8. People become injured and death occurs when voltage pushes electrons through the human body causing the heart to go into ventricular fibrillation.
(a) True
(b) False
9. The severity of an electric shock is dependent on the current flowing through the body, which is impacted by circuit voltage and contact resistance.
(a) True
(b) False

PART 2

NATIONAL ELECTRICAL CODE EXAM (4 HOURS)



Please use the 2017 *Code* book to answer the following questions. If you need a copy of the *Code* book, visit www.MikeHolt.com/Code or call 888.632.2633

- Type AC cable is permitted in _____.
 - wet locations
 - cable trays
 - exposed installations
 - b and c
- Listed FMC and LFMC shall contain an equipment grounding conductor if the raceway is installed for the reason of _____.
 - physical protection
 - flexibility after installation
 - minimizing transmission of vibration from equipment
 - b or c
- Cable _____ made and insulated by approved methods can be located within a cable tray provided they are accessible, and do not project above the side rails where the splices are subject to physical damage.
 - connections
 - jumpers
 - splices
 - conductors
- In one- and two-family dwellings where it is not practicable to achieve an overall maximum bonding conductor or equipment grounding conductor length of _____ ft for CATV, a separate grounding electrode as specified in 250.52(A)(5), (A)(6), or (A)(7) shall be used.
 - 5
 - 8
 - 10
 - 20
- An effective ground-fault current path is an intentionally constructed, low-impedance electrically conductive path designed and intended to carry current during a ground-fault condition from the point of a ground fault on a wiring system to _____.
 - ground
 - earth
 - the electrical supply source
 - none of these
- If more than one luminaire is installed on a branch circuit that is not of the multiwire type, a disconnecting means is not required for every luminaire when the light switch for the space ensures that some of the luminaires in the space will still provide illumination.
 - True
 - False

PART 3

ELECTRICAL CALCULATIONS EXAM (5 HOURS)

The questions in this part relate directly to *Mike Holt's Illustrated Guide to Electrical Exam Preparation* textbook.



CHAPTER 1—ELECTRICAL THEORY

UNITS 1 THROUGH 4— ELECTRICAL THEORY

Figure 1 applies to Questions 1 through 3.

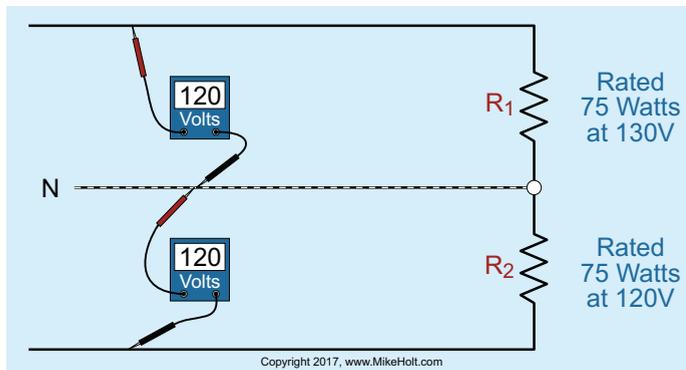


Figure 1

- The resistance of R_1 is _____.
 - 19.20 ohms
 - 22.50 ohms
 - 192 ohms
 - 225 ohms

- The current of Lamp 2 (R_2) is ____ amperes.
 - 0.54
 - 0.63
 - 5.40
 - 6.30
- The total power consumed of both circuits combined will be ____ watts.
 - 139
 - 150
 - 278
 - 300

Figure 2 applies to Questions 4 and 5.

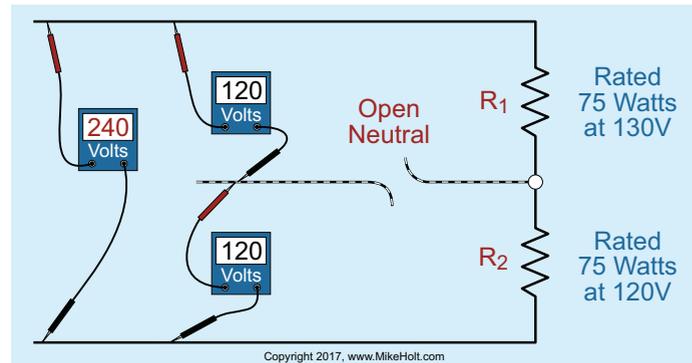


Figure 2

- If the neutral path is opened as shown in Figure 2, the current of the circuit will be ____ amperes.
 - 0.58
 - 0.63
 - 0.93
 - a and b