

NAME: _____

DATE: _____

Choose the best answer. Each question has one best answer.

4A:1) Why is Split-Phase power common in the US?

- ☐ A) It only requires one neutral conductor instead of two
- ☐ B) It's easy to get 120 or 240 volts from the same service
- ☐ C) Not A or B
- ☐ D) A & B

4A:2) How are campground pedestals typically wired?

- ☐ A) Only 120-volts
- ☐ B) Only 240-volts
- ☐ C) 120 and 240-volts
- ☐ D) None of the above

4A:3) What is a bootleg 50-amp service?

- ☐ A) When both poles of the pedestal are jumped to the same leg
- ☐ B) When the two hot-legs are reversed
- ☐ C) When the neutral and ground are reversed
- ☐ D) None of the above

4A:4) Why does a bootleg 50-amp service burn up neutrals?

- ☐ A) The neutral current becomes subtractive
- ☐ B) The neutral current becomes additive
- ☐ C) The neutral current becomes zero
- ☐ D) None of the above

4A:5) Should a pedestal and RV be neutral/ground bonded?

- ☐ A) Yes, both pedestal and RV should be bonded
- ☐ B) Only the pedestal should be bonded
- ☐ C) Only the RV should be bonded
- ☐ D) Neither should be bonded

4B:1) What is 3-phase service?

- ☐ A) Uses 3 wires to carry 3 different voltages
- ☐ B) Has a 120-degree phase shift instead of 180-degrees
- ☐ C) Only used for industrial power
- ☐ D) Generates its own power

4B:2) Comparison with Split-Phase service?

- ☐ A) Campground pedestals only use split-phase
- ☐ B) Outputs 120/208-volts instead of 120/240-volts
- ☐ C) Split-phase is more efficient
- ☐ D) None of the above

4B:3) What is Delta and Wye 3-phase service?

- ☐ A) Delta service is always used in campgrounds
- ☐ B) Delta service is only used by the power companies for distribution
- ☐ C) Wye Service can be used in campground pedestals
- ☐ D) B & C

4B:4) How many transformers does 3-phase service require?

- ☐ A) 1 transformer
- ☐ B) 2 transformers
- ☐ C) 3 transformers
- ☐ D) 4 transformers
- ☐ E) B and D

4B:5) How do you reverse phase rotation in 3-phase power?

- ☐ A) Swap the neutral with any phase leg
- ☐ B) Move all 3 phases clockwise
- ☐ C) Move all 3 phases counterclockwise
- ☐ D) Reverse any two phase legs

4C:1) What is High-Leg Delta?

- ☐ A) It provides 3-phase 240-volt Delta plus split-phase 120/240 volts
- ☐ B) It outputs more power than Low-Leg Delta
- ☐ C) There is no such thing
- ☐ D) A & B

4C:2) What's the main type of campground service in the US?

- ☐ A) Split-Phase 120'240 Volt
- ☐ B) Split-Phase 240/480 Volt
- ☐ C) High-Leg Delta
- ☐ D) 3-Phase Wye

4C:3) What voltages does High-Leg Delta Provide?

- ☐ A) 120 and 240 volts
- ☐ B) 120 and 208 volts
- ☐ C) 120, 208 and 240 volts
- ☐ D) None of the above

4C:4) What does a high-leg panel look like?

- ☐ A) Every third breaker should be labeled orange
- ☐ B) Every second breaker should be labeled orange
- ☐ C) Only the top and bottom breakers are labeled orange
- ☐ D) None of the above

4C:5) Why is High-Leg Delta so dangerous?

- ☐ A) There's no ground in a High-Leg Delta panel
- ☐ B) There's no neutral in a High-Leg Delta panel
- ☐ C) Every third breaker is 208-volts instead of 120-volt to neutral
- ☐ D) Triplen harmonics cause the neutral screws to loosen up

4D:1) Are there 150-amp pedestals?

- ☐ A) Yes, they're everywhere
- ☐ B) No, they don't exist
- ☐ C) Only in 3-phase campgrounds
- ☐ D) None of the above

4D:2) All pedestals must provide full amperage at all times?

- ☐ A) Yes, a 100-amp pedestal must provide 100 amps
- ☐ B) No, a 100-amp pedestal must provide 50 amps
- ☐ C) No, they reduce available power at night
- ☐ D) It depends on the Demand Factor and size of campground

4D:3) What is the Demand Factor for a campground with 36+ sites

- ☐ A) 80%
- ☐ B) 50%
- ☐ C) 45%
- ☐ D) 41%

4D:4) Does the NEC require a minimum voltage at a campground?

- ☐ A) Yes, 115 volts
- ☐ B) Yes, 110 volts
- ☐ C) Yes, 105 volts
- ☐ D) No, 120-volts is just a suggestion with no load

4D:5) Should a campground pedestal be used charge an EV battery?

- ☐ A) Yes, there's plenty of power
- ☐ B) No, because an EV needs 800 volts DC
- ☐ C) No, because it can overload the campground power grid
- ☐ D) B and C