

Electrical Principles Exam – Sample questions

The following is a list of samples questions to help you prepare for the electrical principles exam. The exam will consist of various question types, which are:

- Multiple Choice (one correct answer)
- Numerical Entry
- Checkbox (more than one correct answer)
- Drag and drop

The sample questions are designed to indicate the different types of questions you will encounter and are **not** representative of the full range of topics and content tested in the exam. To view the assessment topics assessed, please visit: <https://training.gov.au/Training/Details/UEERE0051>

Sample Questions

Q1) Which of the following affects the voltage drop along a cable? (Select all correct answers)

- Cross-sectional area (CSA) of the conductor
- Power factor of the circuit
- Installation environment
- Weight of the cable (kg/m)
- Operating temperature
- Cost of the cable
- Conductor material

Q2) Find the voltage drop of a 20m cable with a cross-sectional area of 4 mm² and a current of 26 Amps in a single phase circuit, using Clause 4.2 in AS/NZS 3008.1.1:2017. Assume multicore cable type with circular copper conductor at 75 °C and max power factor.

____ V (2 decimal places)

Q3) Find the current that flows through a conductor if the voltage drop across a 16 mm² multicore circular copper conductor at 90°C is 2.4 V. The length of the conductor is 50m, and it is a single phase circuit operating at 0.8 power factor.

____ A (2 decimal places)