

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What is duty cycle of a signal?

2) Why must an ohmmeter be connected to a disconnected circuit or component.

3) Why should high-impedance meters be used when measuring voltage on computer-controlled circuits?

4) What are the prefixes used in most digital meter displays?

5) How is an ammeter connected to an electrical circuit?

Answer Key

Testname: AEEP8_SHORT6

- 1) Pulse width is the amount of time by percentage that a signal is on compared to being off.
 - 100% indicates that a device is being commanded on all of the time.
 - 50% indicates that a device is being commanded on half of the time.
 - 25% indicates that a device is being commanded on just 25% of the time.Pulse width is used to measure the on time for fuel injectors and other computer-controlled solenoid and devices.
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- 2) An ohmmeter applies a voltage so the circuit has to be off (open)
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- 3) A high-impedance meter is a meter that has a high internal resistance so as not to affect the circuit when it is connected to measure voltage.
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- 4) Electrical units are measured in numbers such as 12 volts, 150 amperes, and 470 ohms. Large units over 1,000 may be expressed in kilo units. Kilo (k) means 1,000.
mega (M) = 1,000,000 (decimal point six places to the right = 1,000,000)
kilo (k) = 1,000 (decimal point three places to the right = 1,000)
milli (m) = 1/1,000 (decimal point three places to the left = 0.001)
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- 5) An ammeter must be connected in the circuit itself in series unless a clamp-on ammeter is used.
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