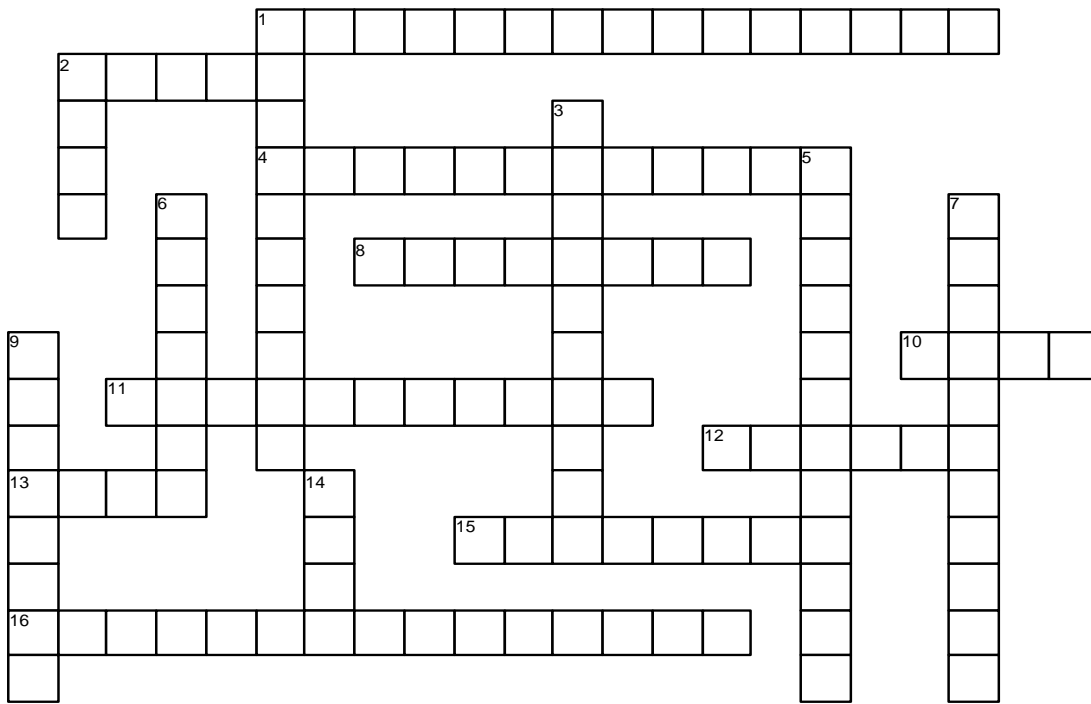


# Parallel Circuits

## Chapter 7



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### ACROSS

- 1 A \_\_\_\_\_ is a complete circuit that has more than one path for the current to flow.
- 2 The total resistance of a parallel circuit is always \_\_\_\_\_ than the smallest resistance in the leg of the circuit.
- 4 If \_\_\_\_\_ resistance is needed, Ohm's law can be used to calculate it because voltage and current are known.
- 8 The separate paths that split and meet at junction points are called \_\_\_\_\_.
- 10 A parallel circuit drops from source voltage to \_\_\_\_\_ (ground) across the resistance in each leg of the circuit.
- 11 The fractions cannot be added together unless they all have the same \_\_\_\_\_.
- 12 Another name for the separate paths that split and meet at junction points are \_\_\_\_\_.
- 13 Parallel circuits are used in \_\_\_\_\_ automotive applications.
- 15 Which \_\_\_\_\_ is R1, and which is R2 is not important.
- 16 The only place where electricity takes the path of \_\_\_\_\_ is in a series circuit where there are not other paths for the current to flow.

### DOWN

- 1 When installing extra lighting, the technician must determine the proper gauge wire and \_\_\_\_\_ device.
- 2 Another name for branches are \_\_\_\_\_.
- 3 \_\_\_\_\_ current law states: The current flowing into any junction of an electrical circuit is equal to the current flowing out of that junction.
- 5 The \_\_\_\_\_ can be calculated first by treating each leg of the parallel circuit as a simple circuit.
- 6 Additional \_\_\_\_\_ can flow when resistances are added in parallel, because each leg of a parallel circuit has its own power and ground and the current flowing through each leg is strictly dependent on the resistance of that leg.
- 7 Most circuits in vehicles are parallel circuits and each branch is connected to the 12 volt \_\_\_\_\_.
- 9 Electronic fuel injector and diesel engine glow plug circuits are two of the most \_\_\_\_\_ tested circuits where parallel circuit knowledge is required.
- 14 There are \_\_\_\_\_ basic methods that can be used to calculate the total resistance in a parallel circuit.