## Quiz App Question Types

## Ohm’s Law DC

|  |  |  |
| --- | --- | --- |
| CurrentSourceVoltmeterAndResistor | **0** |  |
| VoltageSourceAmmeterAndResistor | **1** |  |
| VoltageSourceCurrentSource  ResistorInParallel | **2** |  |
| CurrentSourceVoltageSource  ResistorInSeries | **3** |  |
| LevelFourCircuitA | **4** |  |
| LevelFourCircuitB | **5** |  |
| LevelFourCircuitC | **6** |  |

## Kirchhoff’s Law DC

|  |  |  |
| --- | --- | --- |
| MakeLevelZeroVoltageCircuit | **0** |  |
| MakeLevelZeroCurrentCircuit | **1** |  |
| MakeLevelTwoVoltageCircuit | **2** |  |
| MakeLevelTwoCurrentCircuit | **3** |  |
| MakeLevelThreeCircuit | **4** |  |
| MakeLevelFourCircuit | **5** |  |

## Resistor Networks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NetworksMakeTwoResistorsInParallel | **0** |  | | |
| NetworksMakeTwoResistorsInSeries | **1** |  | | |
| NetworksMakeThreeResistorsInSeries | **2** |  | | |
| NetworksMakeThreeResistorsInParallel | **3** |  | | |
| NetworksMakeOneInSeriesWithTwoInParallel | **4** | 0 | |  |
| 1 | |  |
| NetworksMakeOneInParallelWithASeriesPair | **5** | 0 | |  |
| 1 | |  |
| NetworksMakeFourInSeries | **6** |  | | |
| NetworksMakeFourInParallel | **7** |  | | |
| NetworksMakeOneInSeriesWithThreeInParallel | **8** |  | | |
| NetworksMakeTwoPairsInParallel | **9** | 0 |  | |
| 1 |  | |
| NetworksMakeOneInSeriesWithOneInParallelWithASeriesPair | **10** | 0 |  | |
| 1 |  | |
| NetworksMakeTwoInSeriesThenTwoInParallel | **11** | 0 |  | |
| 1 |  | |
| NetworksMakeOneInParallelWithThreeInSeries | **12** | 0 |  | |
| 1 |  | |
| NetworksMakeOneInParallelWithOneInSeriesWithTwoInParallel | **13** | 0 |  | |
| 1 |  | |
| 2 |  | |
| 3 |  | |
| 4 |  | |
| 5 |  | |
| NetworksMakeFiveInDeltaYShape | **14** |  | | |

## Dividers

|  |  |  |
| --- | --- | --- |
| DividersMakeBasicVoltageCircuitA | **0** |  |
| 0: as shown  1: swap lower resistor with voltmeter  2: swap higher resistor with voltage source  3: do both swaps |
| DividersMakeBasicVoltageCircuitB | **1** |  |
| 0: as shown  1: swap upper resistor with voltmeter  2: swap lower resistor with voltage source  3: do both swaps |
| DividersMakeBasicVoltageCircuitC | **2** |  |
| 0: as shown  1: swap lower resistor with voltmeter  2: swap upper resistor with voltage source  3: do both swaps |
| DividersMakeBasicVoltageCircuitD | **3** |  |
| 0: as shown;  1: swap voltage source and upper resistor  2: swap voltmeter with rightmost resistor  3: do both swaps |
| DividersMakeBasicCurrentCircuitE | **4** |  |
| 0: as shown  1: swap current source and left-most resistor  2: swap ammeter with right-most resistor  3: do both swaps |
| DividersMakeBasicCurrentCircuitF | **5** |  |
| 0: as shown  1: ammeter and series resistor swapped |
| DividersMakeBasicCurrentCircuitG | **6** |  |
| 0: as shown  1: ammeter and series resistor swapped |
| DividersMakeDualVoltageCircuitA | **7** |  |
| 0: as shown  1: swap left-most voltage-source with resistor  2: swap right-most voltage-source with resistor  3: do both swaps |
| DividersMakeDualVoltageCircuitB | **8** |  |
| 0: as shown  1: swap left-most voltage source and resistor  2: swap middle voltage source and resistor  3: do both swaps |
| DividersMakeDualCurrentCircuitD | **9** |  |
| 0: as shown  1: swap left-most current source and resistor  2: swap right-most current source and resistor  3: do both swaps |
| DividersMakeSingleVoltageDesignCircuitA | **10** |  |
| DividersMakeSingleVoltageDesignCircuitB | **11** |  |
| DividersMakeDualVoltageDesignCircuitA | **12** |  |
| 0: as shown  1: swap voltage source and right-most resistor |
| DividersMakeDualVoltageDesignCircuitB | **13** |  |
| 0: as shown  1: swap voltage source and vertical resistor |

## Circuit Theory

|  |  |  |
| --- | --- | --- |
| CircuitsMakeCircuitAv1 | **0** |  |
| 0: as shown  1: swap resistor and current source  2: swap voltage source and ammeter  3: do both swaps |
| CircuitsMakeCircuitAv2 | **1** |  |
| 0: as shown  1: swap resistor and current source  2: swap voltage source and ammeter  3: do both swaps |
| CircuitsMakeCircuitBv1 | **2** |  |
| 0: as shown  1: swap current source and voltmeter  2: swap voltage source and resistor  3 do both swaps |
| CircuitsMakeCircuitBv2 | **3** |  |
| 0: as shown  1: swap current source and voltmeter  2: swap voltage source and resistor  3 do both swaps |
| CircuitsMakeCircuitCv1 | **4** |  |
| 0: as shown  1: swap two random components  2: swap three random components |
| CircuitsMakeCircuitCv2 | **5** |  |
| 0: as shown  1: swap two random components  2: swap three random components |
| CircuitsMakeCircuitDv1 | **6** |  |
| 0: as shown  1: swap two random components  2: swap three random components |
| CircuitsMakeCircuitDv2 | **7** |  |
| 0: as shown  1: swap two random components  2: swap three random components |
| CircuitsMakeCircuitEv1 | **8** |  |
| 0: as shown  1: swap rightmost current source and resistor  2: swap upper current source and voltmeter  3 do both swaps |
| CircuitsMakeCircuitEv2 | **9** |  |
| 0: as shown  1: swap upper current source and resistor  2: swap rightmost current source and voltmeter  3 do both swaps |
| CircuitsMakeCircuitEv3 | **10** |  |
| 0: as shown  1: swap rightmost current source and resistor  2: swap leftmost current source and voltmeter  3 do both swaps |
| CircuitsMakeCircuitEv4 | **11** |  |
| 0: as shown  1: swap upper current source and resistor  2: swap leftmost current source and voltmeter  3 do both swaps |
| CircuitsMakeCircuitFv1 | **12** |  |
| 0: as shown  1: swap ammeter and left-most voltage source  2: swap middle voltage source and resistor  3 do both swaps |
| CircuitsMakeCircuitFv2 | **13** |  |
| 0: as shown  1: swap ammeter and left-most voltage source  2: swap rightmost voltage source and resistor  3 do both swaps |
| CircuitsMakeCircuitLevelFour | **14** |  |