Test on the resistance and resistors

Complete the following test, taking the previous results into account:

Here are several test questions. Say which of the following options is true for each sentence:

1. Total resistance equivalent to various series is always:

a) Greater than the highest of them
b) Less than the lowest of them
c) Greater than the sum of them
d) Depends on the value of the resistances

2. Total resistance equivalent to various parallel resistances is always:

a) Greater than the highest of them
b) Less than the lowest of them
c) Greater than the sum of them
d) Depends on the value of the resistances

3. Total resistance equivalent to various parallel or series is always:

a) Greater than the highest of them
b) Less than the lowest of them
c) Greater than the sum of them
d) Depends on the value of the resistances

4. For two series of the same value, total resistance is:

a) Double its value
b) Half its value
c) Double the sum of its value
d) Half the opposite of its value

5. For two parallel of the same value, total resistance is:

a) Double its value
b) Half its value
c) Double the sum of its value
d) Half the opposite of its value

6. What can be added to a series to ensure that the new total resistance is nearly the same as the original – in other words, to ensure that it is not affected much?

a) A very high resistor (10 times greater than the first one)
b) A very low resistor (10 times less than the first one)
c) Nothing should be added because this always affects it, however little this may be

d) Any resistor

7. What can be added to parallel to ensure that the new total resistance is nearly the same as the original – in other words, to ensure that it is not affected much?

a) A very high resistor (10 times greater than the first one)
b) A very low resistor (10 times less than the first one)
c) Nothing should be added because this always affects it, however little this may be
d) Any resistance

8. Using 10K and 1K resistors, how should you connect them in order to obtain a total resistance of around 1.9K?

a) By connecting two 1K resistors in series
b) By connecting 1K resistor and 10K resistor in parallel, and 1K resistor in series to these
c) By connecting 1K resistor and 10K resistor in series, and 1K resistor in parallel to these
d) This cannot be done

9. Using 10K and 1K resistors, how should you connect them in order to obtain a total resistor of more or less 10.9K?

a) By connecting two 1K resistors in series
b) By connecting 1K resistor and 10K resistor in parallel, and 10K resistor in series to these
c) By connecting 1K resistor and 10K resistor in series, and 10K resistor in parallel to these
d) By connecting 1K resistor and 10K resistor in parallel, and 1K resistor in series to these

10. Using 10K and 1K resistances, how should you connect them in order to obtain a total resistance of more or less 1.5K?

a) By connecting three 1K resistances in series
b) By connecting one 1K resistance and another 1K resistance in parallel, and one I0K resistance in series to these
c) By connecting one 1K resistance and another 1K resistance in series, and one IK resistance in parallel to these
d) By connecting one 1K resistance and another 10K resistance in parallel, and one IK resistance in series to these