This document belongs to The Physics Classroom. It should not appear on other websites.

Ohm's Law

Question Group 1

Question 1
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled (with no change in its resistance), then its new current would be _____ milliAmps.

Question 2
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled (with no change in its resistance), then its new current would be _____ milliAmps.

Question 3
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled (with no change in its resistance), then its new current would be _____ milliAmps.

Question Group 2

Question 4
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled (with no change in its resistance), then its new current would be _____ milliAmps.

Question 5
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled (with no change in its resistance), then its new current would be _____ milliAmps.

Question 6
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled (with no change in its resistance), then its new current would be _____ milliAmps.

Question Group 3

Question 7
The current in the wires of a circuit is 60.0 milliAmps. If the resistance of the circuit were doubled (with no change in voltage), then its new current would be _____ milliAmps.

Question 8
The current in the wires of a circuit is 120.0 milliAmps. If the resistance of the circuit were doubled (with no change in voltage), then its new current would be _____ milliAmps.

Question 9
The current in the wires of a circuit is 180.0 milliAmps. If the resistance of the circuit were doubled (with no change in voltage), then its new current would be _____ milliAmps.

Question Group 4

Question 10
The current in the wires of a circuit is 60.0 milliAmps. If the resistance of the circuit were tripled (with no change in voltage), then its new current would be _____ milliAmps.

Question 11
The current in the wires of a circuit is 120.0 milliAmps. If the resistance of the circuit were tripled (with no change in voltage), then its new current would be _____ milliAmps.

Question 12
The current in the wires of a circuit is 180.0 milliAmps. If the resistance of the circuit were tripled (with no change in voltage), then its new current would be _____ milliAmps.

Question Group 5

Question 13
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were halved (i.e., one-half of the original voltage) (with no change in its resistance), then its new current would be _____ milliAmps.

Question 14

The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were halved (i.e., one-half of the original voltage) (with no change in its resistance), then its new current would be _____ milliAmps.

Question 15
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were halved (i.e., one-half of the original voltage) (with no change in its resistance), then its new current would be _____ milliAmps.

Question Group 6

Question 16
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were one-third of the original voltage (with no change in its resistance), then its new current would be _____ milliAmps.

Question 17
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were one-third of the original voltage (with no change in its resistance), then its new current would be _____ milliAmps.

Question 18
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were one-third of the original voltage (with no change in its resistance), then its new current would be _____ milliAmps.

Question Group 7

Question 19
The current in the wires of a circuit is 60.0 milliAmps. If the resistance of the circuit were halved (i.e., reduced to one-half the original value) (with no change in voltage), then its new current would be _____ milliAmps.

Question 20
The current in the wires of a circuit is 120.0 milliAmps. If the resistance of the circuit were halved (i.e., reduced to one-half the original value) (with no change in voltage), then its new current would be _____ milliAmps.

Question 21
The current in the wires of a circuit is 180.0 milliAmps. If the resistance of the circuit were halved (i.e., reduced to one-half the original value) (with no change in voltage), then its new current would be _____ milliAmps.

Question Group 8

Question 22
The current in the wires of a circuit is 60.0 milliAmps. If the resistance of the circuit were reduced to one-third the original value (with no change in voltage), then its new current would be _____ milliAmps.

Question 23
The current in the wires of a circuit is 120.0 milliAmps. If the resistance of the circuit were reduced to one-third the original value (with no change in voltage), then its new current would be _____ milliAmps.

Question 24
The current in the wires of a circuit is 180.0 milliAmps. If the resistance of the circuit were reduced to one-third the original value (with no change in voltage), then its new current would be _____ milliAmps.

Question Group 9

Question 25
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled and the resistance were tripled, then its new current would be _____ milliAmps.

Question 26
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled and the resistance were tripled, then its new current would be _____ milliAmps.

Question 27
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were doubled and the resistance were tripled, then its new current would be _____ milliAmps.

Question Group 10

Question 28
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were doubled, then its new current would be _____ milliAmps.

Question 29
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were doubled, then its new current would be _____ milliAmps.

Question 30
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were doubled, then its new current would be _____ milliAmps.

Question Group 11

Question 31
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were halved, then its new current would be _____ milliAmps.

Question 32
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were halved, then its new current would be _____ milliAmps.

Question 33
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit were tripled and the resistance were halved, then its new current would be _____ milliAmps.

Question Group 12

Question 34
The current in the wires of a circuit is 60.0 milliAmps. If the voltage impressed across the ends of the circuit was doubled and the resistance was one-third the original value, then its new current would be _____ milliAmps.

Question 35
The current in the wires of a circuit is 120.0 milliAmps. If the voltage impressed across the ends of the circuit was doubled and the resistance was one-third the original value, then its new current would be _____ milliAmps.

Question 36
The current in the wires of a circuit is 180.0 milliAmps. If the voltage impressed across the ends of the circuit was doubled and the resistance was one-third the original value, then its new current would be _____ milliAmps.