

# Ohm's law $U = R \times I$

Physics - grade 8-9

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_

1.  $U = 15 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

2.  $U = 30 \text{ V}$ ,  $R = 10 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

3.  $U = 20 \text{ V}$ ,  $R = 20 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

4.  $R = 5 \Omega$ ,  $I = 0.5 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

5.  $R = 20 \Omega$ ,  $I = 0.5 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

6.  $U = 5 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

7.  $U = 60 \text{ V}$ ,  $R = 20 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

8.  $U = 4 \text{ V}$ ,  $R = 2 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

9.  $R = 2 \Omega$ ,  $I = 2 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

10.  $U = 1 \text{ V}$ ,  $R = 2 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

11.  $R = 2 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

12.  $R = 10 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

13.  $U = 2.5 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

Answer: \_\_\_\_\_

14.  $R = 20 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

Answer: \_\_\_\_\_

# Ohm's law $U = R \times I$ - Answer key

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_

1.  $U = 15 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

**3 A**

2.  $U = 30 \text{ V}$ ,  $R = 10 \Omega$ . Current  $I$ ?

**3 A**

3.  $U = 20 \text{ V}$ ,  $R = 20 \Omega$ . Current  $I$ ?

**1 A**

4.  $R = 5 \Omega$ ,  $I = 0.5 \text{ A}$ . Voltage  $U$ ?

**2.5 V**

5.  $R = 20 \Omega$ ,  $I = 0.5 \text{ A}$ . Voltage  $U$ ?

**10 V**

6.  $U = 5 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

**1 A**

7.  $U = 60 \text{ V}$ ,  $R = 20 \Omega$ . Current  $I$ ?

**3 A**

8.  $U = 4 \text{ V}$ ,  $R = 2 \Omega$ . Current  $I$ ?

**2 A**

9.  $R = 2 \Omega$ ,  $I = 2 \text{ A}$ . Voltage  $U$ ?

**4 V**

10.  $U = 1 \text{ V}$ ,  $R = 2 \Omega$ . Current  $I$ ?

**0.5 A**

11.  $R = 2 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

**6 V**

12.  $R = 10 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

**30 V**

13.  $U = 2.5 \text{ V}$ ,  $R = 5 \Omega$ . Current  $I$ ?

**0.5 A**

14.  $R = 20 \Omega$ ,  $I = 3 \text{ A}$ . Voltage  $U$ ?

**60 V**