

Name: KEY
 Period: _____ Table: _____

8

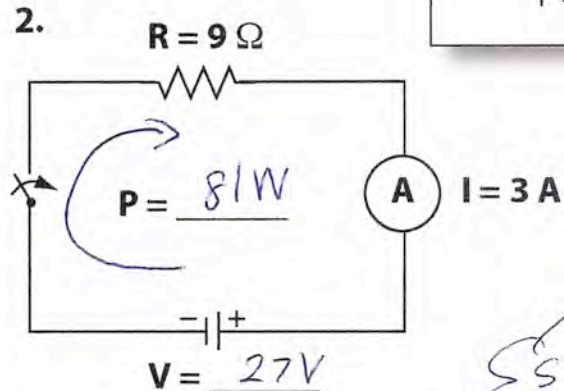
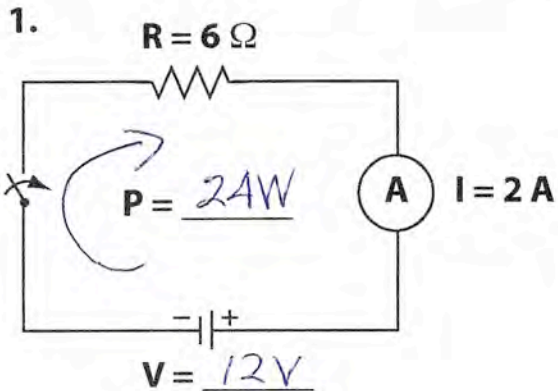
General Physics
 7.1 Ohm's Law
 Homework

Solve for the missing variable **AND** for the **Power** for each circuit. [1 point ea]

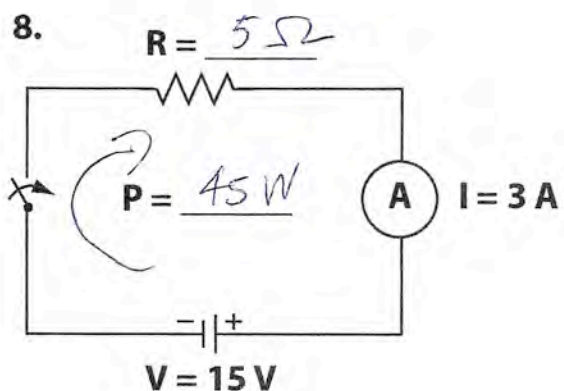
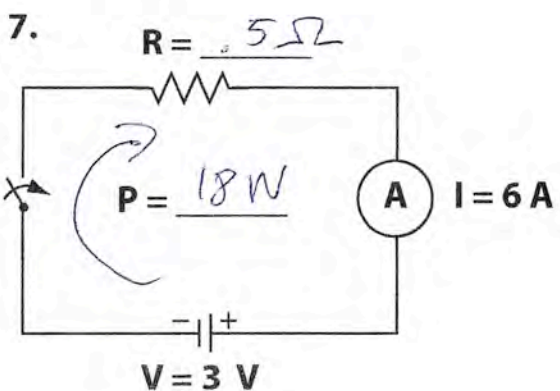
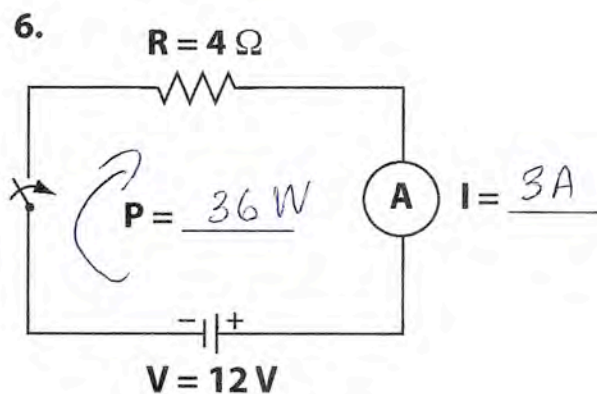
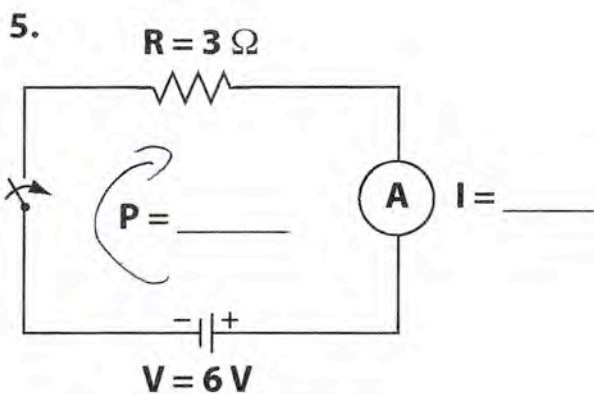
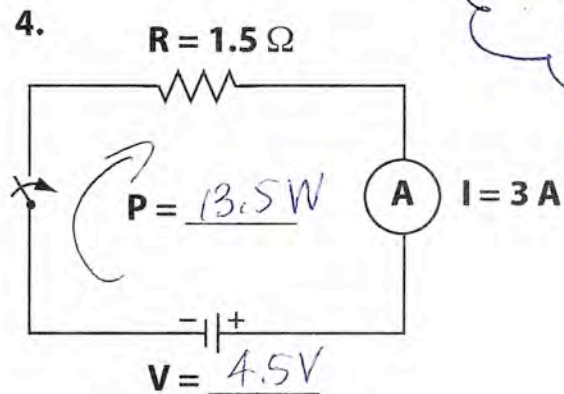
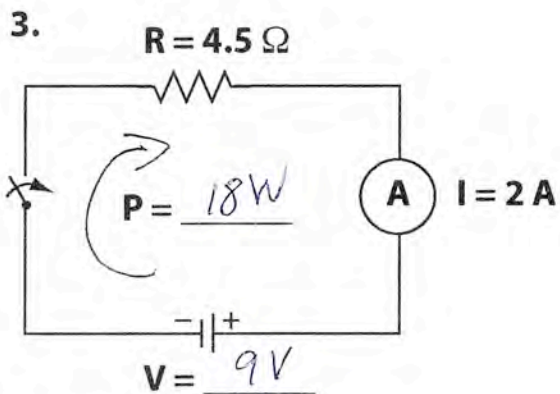
Equations

$V = IR$

$P = IV$



SEE
 WORKSHEET
 FOR
 WORK
 PG 2



1. DATA: $R = 6\Omega$
 $I = 2A$

$$V = ?$$
$$V = IR$$
$$= (2A)(6\Omega)$$

$$V = 12V$$

$$P = ?$$
$$P = IV$$
$$= (2A)(12V)$$

$$P = 24W$$

2. DATA
 $R = 9\Omega$
 $I = 3A$

$$V = ?$$
$$V = IR$$
$$= (3A)(9\Omega)$$

$$V = 27V$$

$$P = ?$$
$$P = IV$$
$$= (3A)(27V)$$

$$P = 81W$$

7.1 OHM'S LAW HW
WORKSHEET

3. DATA: $R = 4.5\Omega$
 $I = 2A$

$$V = ?$$
$$V = IR$$
$$= (2A)(4.5\Omega)$$

$$V = 9V$$

$$P = ?$$
$$P = IV$$
$$= (2A)(9V)$$

$$P = 18W$$

4. DATA: $R = 1.5\Omega$
 $I = 3A$

$$V = ?$$
$$V = IR$$
$$= (3A)(1.5\Omega)$$

$$V = 4.5V$$

$$P = ?$$
$$P = IV$$
$$= (3A)(4.5V)$$

$$P = 13.5W$$

5. DATA: $R = 3\Omega$
 $V = 6V$

$$I = ?$$
$$V = IR$$
$$6V = \frac{I(3\Omega)}{3\Omega}$$
$$I = 2A$$

$$P = ?$$
$$P = IV$$
$$= (2A)(6V)$$

$$P = 12W$$

6. DATA $R = 4\Omega$
 $V = 12V$

$$I = ?$$
$$V = IR$$
$$12V = \frac{I(4\Omega)}{4\Omega}$$
$$I = 3A$$

$$P = ?$$
$$P = IV$$
$$= (3A)(12V)$$

$$P = 36W$$

7. DATA: $V = 3V$
 $I = 6A$

$$R = ?$$
$$V = IR$$
$$3V = \frac{(6A)R}{6A}$$
$$R = .5\Omega$$

$$P = ?$$
$$P = IV$$
$$= (6A)(3V)$$
$$= 18W$$

8. DATA $V = 15V$
 $I = 3A$

$$R = ?$$
$$V = IR$$
$$15V = \frac{(3A)R}{(3A)}$$
$$R = 5\Omega$$

$$P = IV$$
$$= (3A)(15V)$$
$$P = 45W$$