7. A toaster has a resistance of 60 Ω and is plugged into a power supply that needs 240 J of energy to move 2 C of charge, what is the current in the toaster?

$E = 240J$
$Q = 2C$
$V = x$

$V = \dfrac{240J}{2C}$

$V = 120V$

$R = 60\Omega$
$V = 120V$
$I = x$

$60\Omega = \dfrac{120V}{x}$

$\boxed{x = 2.67A}$

The answer is 2 A

8. A circuit has a potential difference of 20 Ω and draws a current 4.2 A what is the resistance in the circuit?

$R = x$
$V = 20V$
$I = 4.2A$

$R = \dfrac{20V}{4.2A}$

$\boxed{R = 4.76\Omega}$

9. A circuit has a potential difference of 60 V and a current of 15 A, what is the resistance in the circuit?

$R = x$
$V = 60V$
$I = 15A$

$R = \dfrac{60V}{15A} = \boxed{4\Omega}$

10. A stove uses a power source of 240 V and draws a current of 5.0A what is the resistance in the stove?

$R = x$
$V = 240V$
$I = 5.0A$

$R = \dfrac{240V}{5.0A} = \boxed{48\Omega}$

11. A dryer has a resistance of 800 Ω and draws a current of 0.30 A what is the potential difference

$R = 800\Omega$
$V = x$
$I = 0.30A$

$800\Omega = \dfrac{x}{0.30A}$

$x = \boxed{240V}$

12. A radio has a power source of 6.0 V and operates with a current of 0.40 A what is the resistance in the circuit?

$R = x$
$V = 6.0V$
$I = 0.40A$

$R = \dfrac{6.0V}{0.40A} = \boxed{15\Omega}$