



4. The current ( $I$ ) in an electrical circuit varies inversely with the resistance ( $R$ ). This relationship can be represented by the formula

$$I = \frac{V}{R}$$

where  $V$  is a constant voltage that needs to be determined. If the current in a circuit is 35 amps when the resistance is 12 ohms ( $\Omega$ ), what would the current be if the resistance is 35  $\Omega$  ?

- A. 12 amps
- B. 102 amps
- C. 420 amps
- D. 1,225 amps