

# Current Word Problem Drills

Determine the unknown in each of the following:

- 1 A device draws 0.869 A of current from a source for 3.32 min. What is the total amount of charged delivered?
- 2 In 13 s, 6.16 C of charge pass through a device. What is the current through the device?
- 3 In 1.92 min, 27.72 C of charge pass through a device. What is the current through the device?
- 4 A device draws 0.502 A of current from a source for 1.22 min. What is the total amount of charged delivered?
- 5 In 3.07 min, 62.93 C of charge pass through a device. What is the current through the device?
- 6 In 25 s, 12 C of charge pass through a device. What is the current through the device?
- 7 A device draws 0.832 A of current from a source for 3.15 min. What is the total amount of charged delivered?
- 8 A current of 0.321 A delivers 78 C of charge. How much time did this take in minutes?
- 9 In 25 s, 7.33 C of charge pass through a device. What is the current through the device?
- 10 A current of 0.878 A delivers 111.51 C of charge. How much time did this take in minutes?
- 11 A current of 0.444 A delivers 32.41 C of charge. How much time did this take in minutes?
- 12 A device draws 0.189 A of current from a source for 3.25 min. What is the total amount of charged delivered?
- 13 A current of 0.211 A delivers 24.05 C of charge. How much time did this take in minutes?
- 14 In 1.32 min, 48.27 C of charge pass through a device. What is the current through the device?
- 15 A current of 0.615 A delivers 34.44 C of charge. How much time did this take?

## Answers

1.  $Q = 172.93 \text{ C}$  2.  $I = 0.474 \text{ A}$  3.  $I = 0.241 \text{ A}$  4.  $Q = 36.65 \text{ C}$  5.  $I = 0.342 \text{ A}$  6.  $I = 0.48 \text{ A}$  7.  $Q = 157.25 \text{ C}$  8.  $t = 4.1 \text{ min}$  9.  $I = 0.293 \text{ A}$  10.  $t = 2.1 \text{ min}$  11.  $t = 1.2 \text{ min}$  12.  $Q = 36.86 \text{ C}$  13.  $t = 1.9 \text{ min}$  14.  $I = 0.611 \text{ A}$  15.  $t = 56\text{s}$