Q1.   Find the charge in coulombs of (a) 5.31 x 10^{20} electrons, and (b) 2.9 x 10^{22} protons.

Q2.   How many protons have a combined charge of 6.8 pC?

Q3.   Find the current flow through a light bulb from a steady movement of (a) 60 C in 4 s, (b) 15 C in 2 min, and (c) 10^{22} electrons in 1 h.

Q4.   Electrons pass to the right through a wire cross section at the rate of 6.4 x 10^{21} electrons per minute. What is the current in the wire?

Q5   Figure 1-8 shows a circuit diagram of a voltage source of V volts connected to a current source of I amperes. Find the power absorbed by the voltage source for

        (a) $V = 2$ V, $I = 4$ A
        (b) $V = 3$ V, $I = -2$ A
        (c) $V = -6$ V, $I = -8$ A
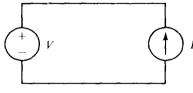

Fig. 1-8