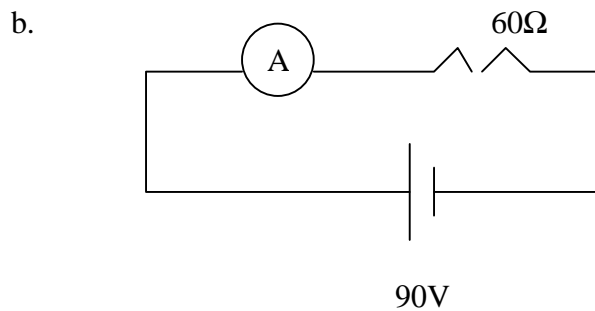


Solutions to p124

1. $V = IR$
 $120 = I (30)$
 $I = 120/30 = \mathbf{4.0\ A}$
2. $V = IR = (4.0)(30) = \mathbf{120\ V.}$
3. $R = 1/G = 1/0.25 = 4.0\ \Omega.$
 $V = I R = 2.0(4.0) = \mathbf{8.0\ V}$
4. a. $V = IR$
 $90 = I (60)$
 $I = 90/60 = 1.5\ \text{A}$



5. b. $V = IR = 1.75(16) = 28\ \text{V.}$
6. a. On this graph, current is on the x axis and voltage is on the y axis.
Also the point (3,3) does not seem to agree with the rest. Draw a line slightly above the other four points: slope = $(3.25-0)/(2.5 - 0) = 1.3.$
b. Since $V/I = R$, the slope in this case is resistance.