

Problem Session
Current and resistance (answers)

1. 53 A
2. a) 0.0316 C
b) 0.0184 C
3. a) $1.87 \times 10^{-8} \Omega\text{m}$
b) 3.23 A
c) 3 V/m
4. a) 13.75 Ω
b) 7.38 A
5. $I_2 = \text{same}$
 $v_{d1} = 4 v_{d2}$
6. $\frac{E_2}{E_1} = \frac{1}{2}$
7. a) 18 Ω
b) 8.7 V
c) 0.34 W
8. a) 40.32 V
b) 4.98 W