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- A. 20.9 A
  - B. 105 A
  - C. 132 A
  - D. 164 A







































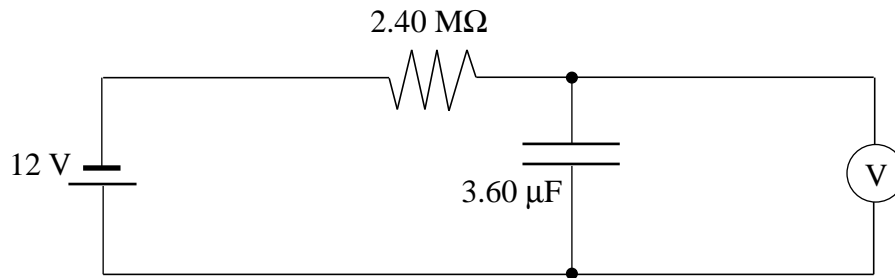








1. In a certain transistor the collector current changes from 1.20 mA to 1.75 mA when the base current varies from 4.6  $\mu\text{A}$  to 8.6  $\mu\text{A}$ . What is the current gain for this transistor? **(3 marks)**
2. A 2.40 M $\Omega$  resistor and a 3.60  $\mu\text{F}$  capacitor are connected in an RC circuit as shown.



- a) What is the time constant for this circuit? **(2 marks)**
- b) What is the charge stored in the capacitor at the instant the voltmeter reads 9.00 V? **(2 marks)**



















