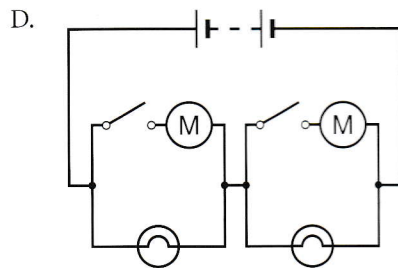
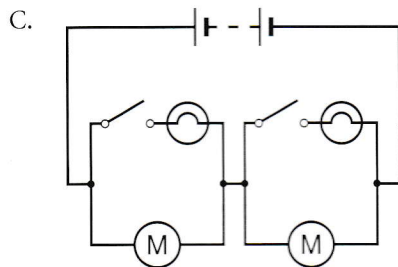
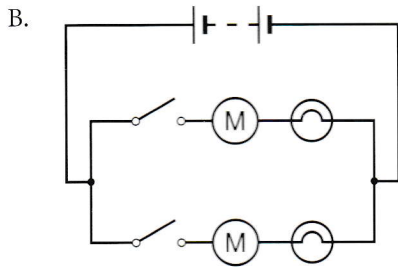
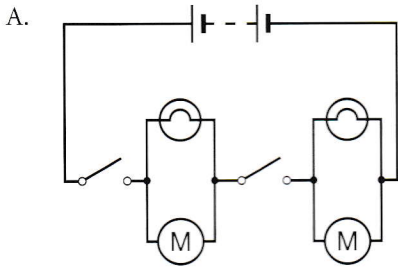


2. Larry wants to build a battery-powered model car that consists of two motors. Each of the motors having a separate indication lamp can be switched on and off independently. Which of the following circuits shows the most suitable design?



3. Two identical bulbs are connected into a circuit as shown. If the current through one of the bulbs is 0.5 A, what is the number of electrons passing through point X in 1 minute? The magnitude of charge of an electron is 1.60×10^{-19} C.

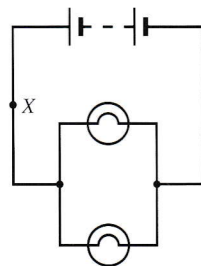
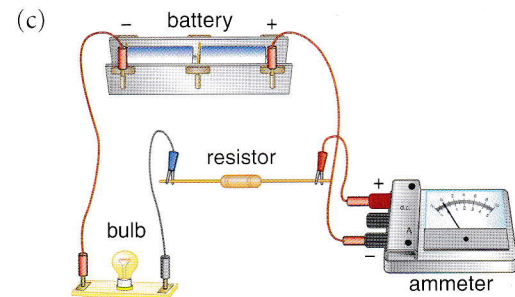
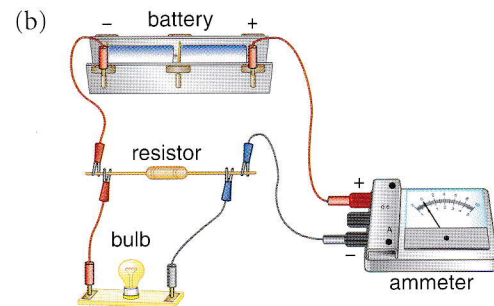
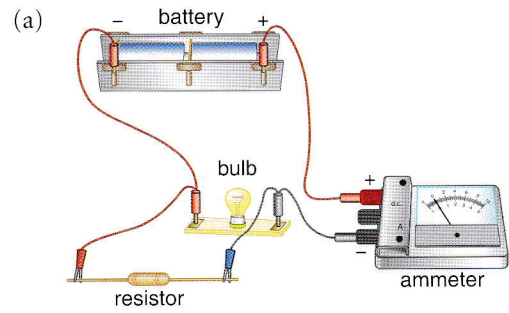


Fig. Q3

- A. 1.60×10^{20} B. 1.88×10^{20}
 C. 3.75×10^{20} D. 7.50×10^{20}

4. State whether or not the following figures are the proper connections of an ammeter that measures the current passing through the bulb.



5. What is the reading shown by the ammeter in each of the following cases?

