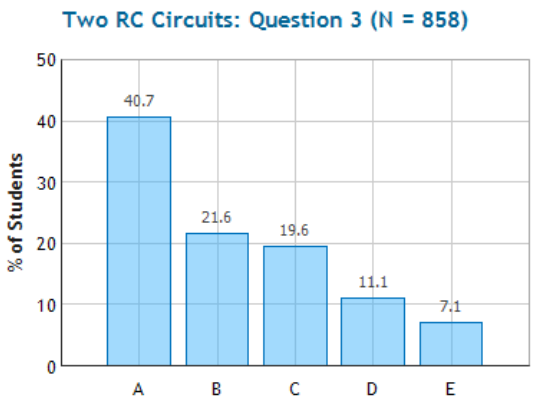
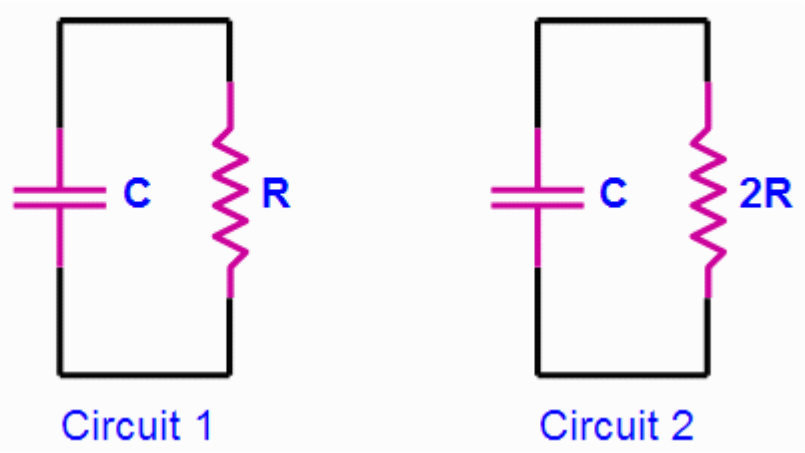
# CheckPoint 2

The two circuits shown below contain identical capacitors that hold the same charge at t = 0. Circuit 2 has twice as much resistance as circuit 1.

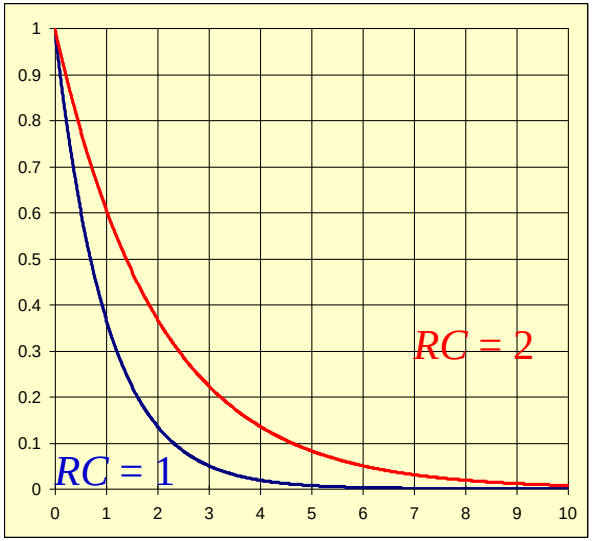



**Which of the following statements best describes the charge remaining on each of the the two capacitors for for any time after t = 0?**

- $Q_1 < Q_2$
- $Q_1 > Q_2$
- $Q_1 = Q_2$
- $Q_1 < Q_2$ at first and then $Q_1 > Q_2$ after a long time
- $Q_1 > Q_2$ at first and then $Q_1 < Q_2$ after a long time

$$Q = Q_0 e^{-t/RC}$$




Look at plot!