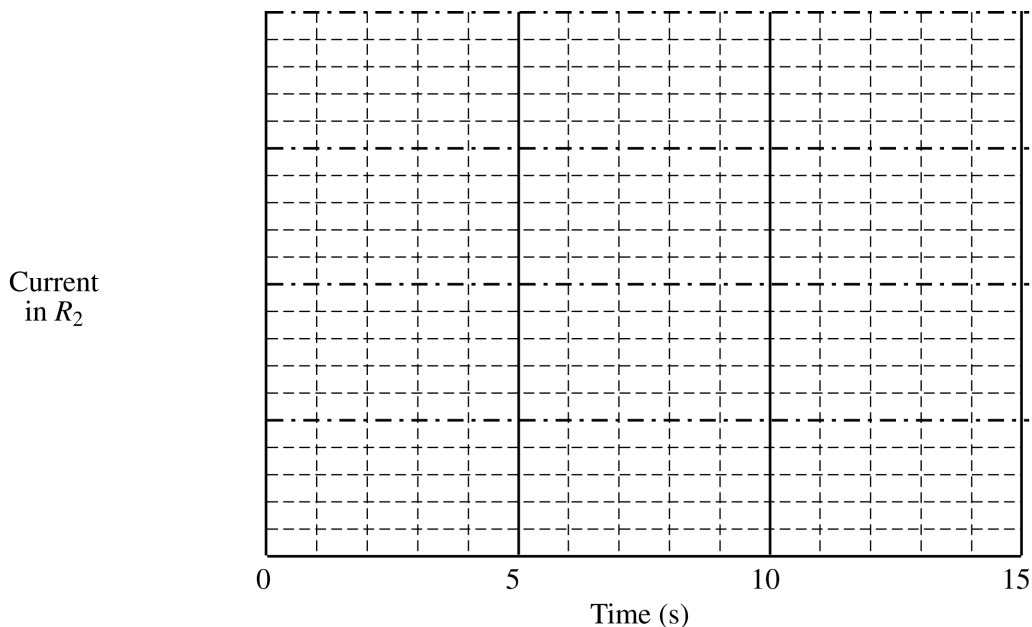


2004 AP[®] PHYSICS C: ELECTRICITY AND MAGNETISM
FREE-RESPONSE QUESTIONS

- (e) On the axes below, graph the current in R_2 as a function of time from 0 to 15 s. Label the vertical axis with appropriate values.



Resistor R_2 is removed and replaced with another resistor of lesser resistance. Switch S remains closed for a long time.

- (f) Indicate below whether the energy stored in the capacitor is greater than, less than, or the same as it was with resistor R_2 in the circuit.

____ Greater than ____ Less than ____ The same as

Explain your reasoning.