

The switch of the circuit will first be connected to a and charges up the capacitor. After that, the switch is changed to b .

How will the amplitude and the period of the oscillation current differ from the circuit below to an equivalent circuit, where the inductance L is changed to $\frac{1}{2}L$?

Fill in the blank.

The amplitude will _____ with the factor of ____, the period will _____ with the factor of ____.

- a) increase, 2, decrease, $\frac{1}{2}$
- b) increase, $\sqrt{2}$, decrease, $\frac{1}{\sqrt{2}}$
- c) decrease, $\frac{1}{2}$, increase, 2
- d) decrease, $\frac{1}{\sqrt{2}}$, increase, $\sqrt{2}$
- e) decrease, $\frac{1}{\sqrt{2}}$, decrease, $\frac{1}{\sqrt{2}}$
- f) decrease, $\frac{1}{2}$, decrease, $\frac{1}{2}$

