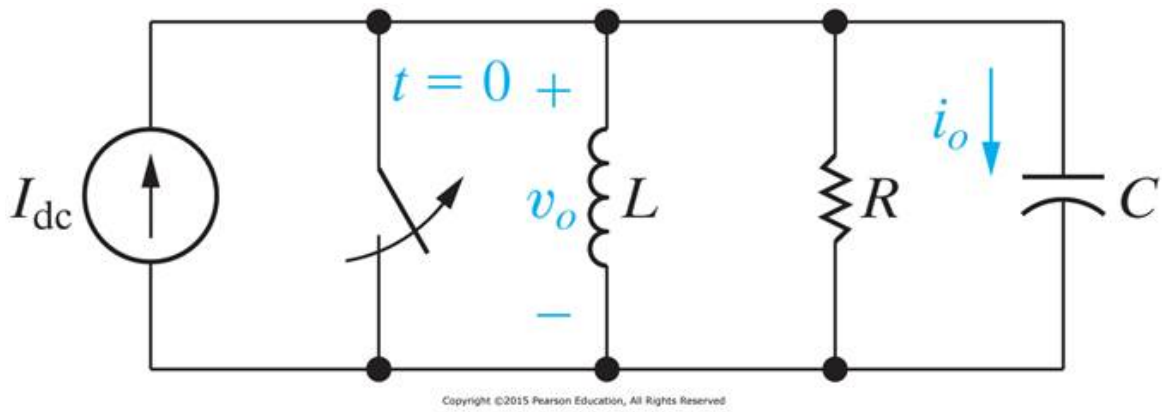
Started on	Wednesday, 6 March 2019, 7:41 PM
State	Finished
Completed on	Wednesday, 6 March 2019, 7:44 PM
Time taken	2 mins 43 secs
Grade	**100.00** out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00



Quiz 5a

The circuit parameters for this circuit are

R = 20 Ω (Ohm) L = 50 mH (milli H) C = 20 μF (micro F) I_{dc} = 75 mA (milli A)

Also given $V_0(s) = \dfrac{\frac{I_{dc}}{C}}{s^2 + s\frac{1}{RC} + \frac{1}{LC}}$

Find the time domain voltage $v_0(t)$ for $t \geq 0$. (t equal to or greater than zero)

$v_0(t)$ = [2.5 ✓ exp[-500 ✓ t] + -2.5 ✓ exp[-2000 ✓ t]]

u(t) V

Answer is in the form $v_0(t) = [A\, e^{Bt} + C\, e^{Dt}]$ u(t) V and where |B| is less than |D|

$v_0(t) = [2.5\, e^{-500t} - 2.5\, e^{-2000t}]$ u(t) V

Correct

Marks for this submission: 100.00/100.00.

◄ Quiz 4 - Chapter 12

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Quiz 6 - Chapter 13 ►