

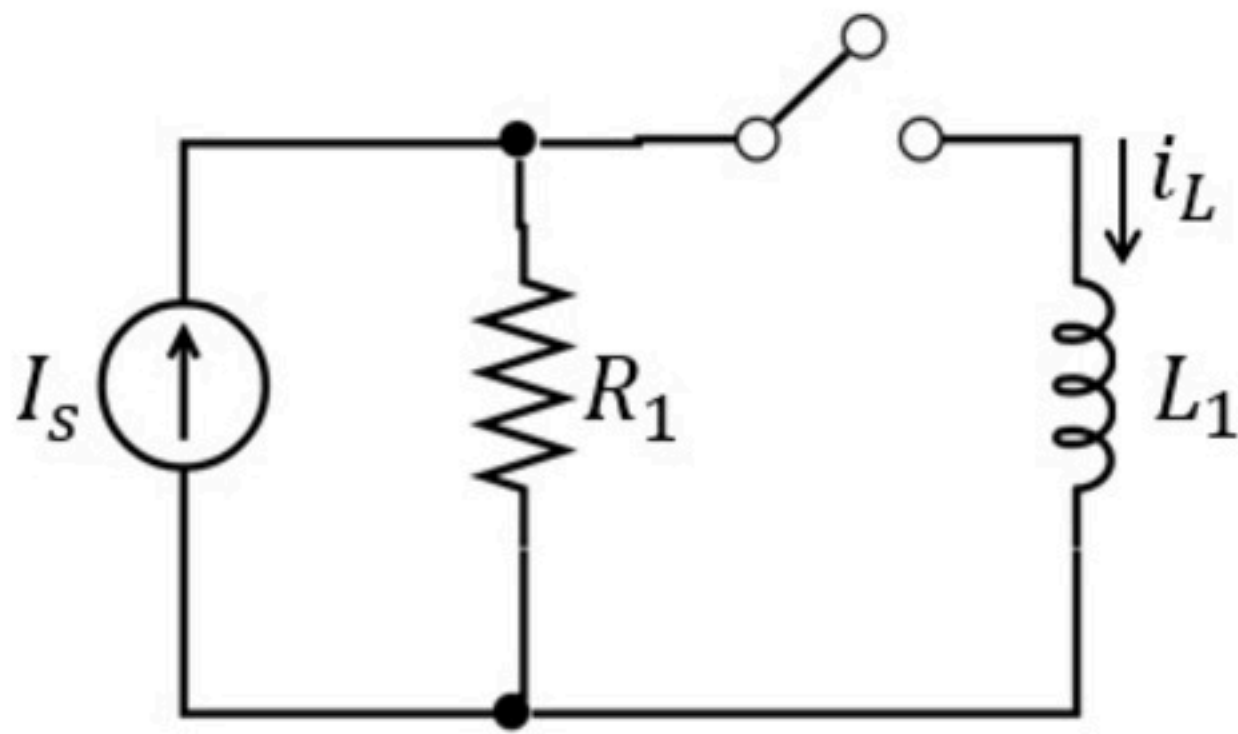
# First order circuits 004

Problem has been graded.

The switch closes at time  $t = 0$ .

Find the current  $i_L$  for  $t > 0$ :

$$i_L(t) = A \cdot e^{-t/\tau} + B$$



Given Variables:

$I_s$  : 2 A

$R_1$  : 10 kohm

$L_1$  : 10 mH

Calculate the following:

A (A) :

-2



B (A) :

2



$\tau$  (ms) :

0.001



Hint: What is the current  $i_L$  for  $t < 0$ ?