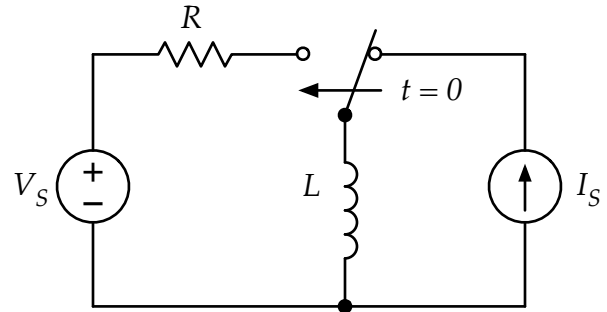


In the circuit shown, the switch flips from the right to the left at  $t = 0$ . the expressions for the inductor current and voltage for  $t > 0$  are:

$$i_L(t) = 4 \text{ A} + (4 \text{ A}) \cdot e^{-t/0.025 \text{ s}}$$

$$v_L(t) = (-80\text{V}) \cdot e^{-t/0.025 \text{ s}}$$



a) Specify the numerical values for  $V_S$ ,  $I_S$ ,  $R$  and  $L$ .

b) At what time during the transient does the energy stored in the inductor reach 9 J?

$V_S =$  \_\_\_\_\_ ;  $I_S =$  \_\_\_\_\_

$R =$  \_\_\_\_\_ ;  $L =$  \_\_\_\_\_

$t(E = 9 \text{ J}) =$  \_\_\_\_\_