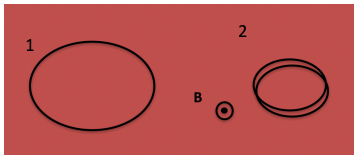
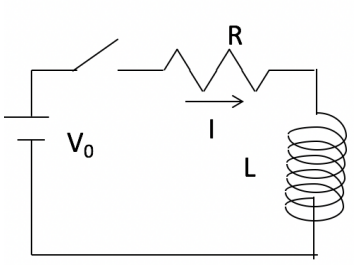
Loop 1 sits in a uniform field B which is increasing in magnitude. Loop 2 has the SAME LENGTH OF WIRE looped (coiled) to make two (smaller) loops. How do the induced EMFs compare?



A. EMF(1)=4 EMF(2)
B. EMF(1) = 2 EMF(2)
C. They are both the same.
D. EMF(2)= 4 EMF(1)
E. EMF(2) = 2 EMF(1)

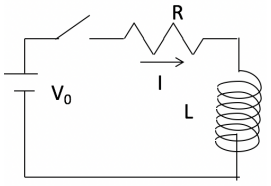
The switch is closed at $t = 0$. What can you say about $I(t = 0+)$?

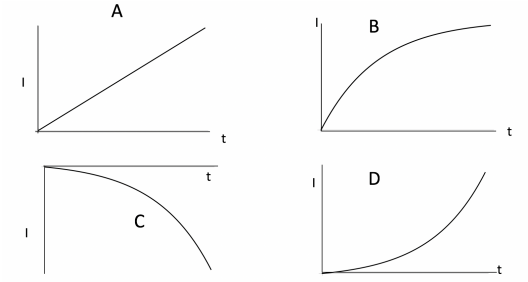
A. Zero
B. V_0/R
C. V_0/L
D. Something else!
E. ???



The switch is closed at $t = 0$. Which graph best shows $I(t)$?

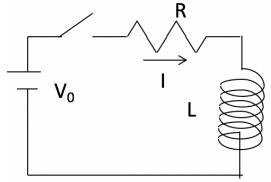
E) None of these (they all have a serious error!)





The switch is closed at $t = 0$. What can you say about the magnitude of ΔV(across the inductor) at $(t = 0+)$?

A. Zero
B. V_0
C. L
D. Something else!
E. ???



The complex exponential: $e^{i\omega t}$ is useful in calculating properties of many time-dependent equations. According to Euler, we can also write this function as:

A. $\cos(i\omega t) + \sin(i\omega t)$
B. $\sin(\omega t) + i\cos(\omega t)$
C. $\cos(\omega t) + i\sin(\omega t)$
D. MORE than one of these is correct
E. None of these is correct!

What is $|2 + i|$?

A. 1
B. $\sqrt{3}$
C. 5
D. $\sqrt{5}$
E. Something else!