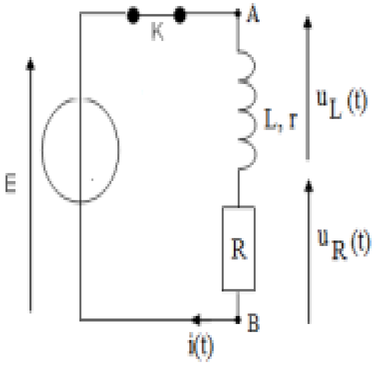
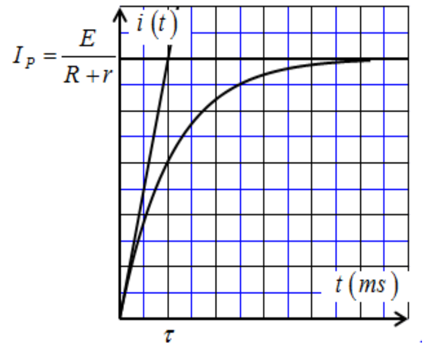
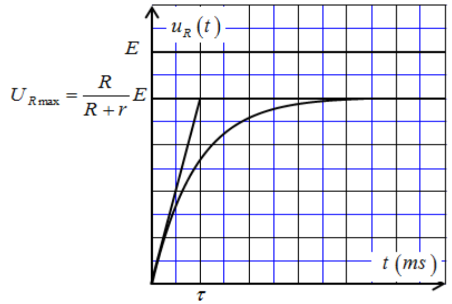
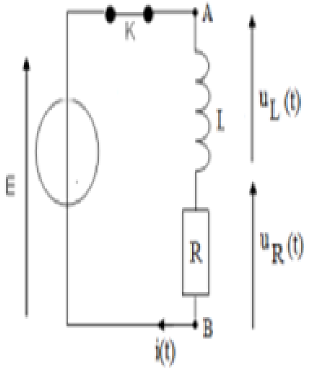
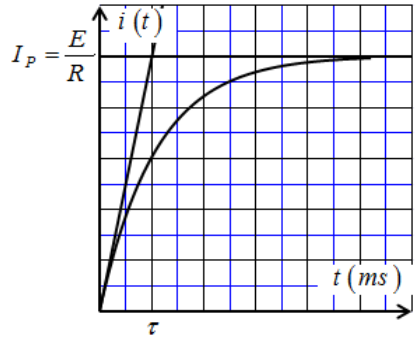
	Selon la loi d'additivité des tension on a $u_L + u_R = E$ $L\frac{di}{dt} + r.i + R.i = E$ $L\frac{di}{dt} + (r+R).i = E$ $\frac{L}{r+R}\frac{di}{dt} + i = \frac{E}{r+R}$	$i(t)=A\left(1-e^{-\frac{t}{\tau}}\right) \Leftrightarrow i(t)=A-Ae^{-\frac{t}{\tau}} \Leftrightarrow \frac{di}{dt}=\frac{A}{\tau}e^{-\frac{t}{\tau}}$ $\frac{L}{R+r}\left(\frac{A}{\tau}e^{-\frac{t}{\tau}}\right)+A-Ae^{-\frac{t}{\tau}}=\frac{E}{R+r}$ $Ae^{-\frac{t}{\tau}}\left(\frac{L}{R+r}\frac{1}{\tau}-1\right)=\frac{E}{R+r}-A \Leftrightarrow \begin{cases}\tau=\frac{L}{R+r}\\ A=\frac{E}{R+r}\end{cases}$	
	Selon la loi d'additivité des tension on a $u_L + u_R = E$ $L\frac{di}{dt} + r.i + R.i = E \Leftrightarrow L\frac{di}{dt} + (r+R).i = E$ $\frac{L}{r+R}\frac{di}{dt} + i = \frac{E}{r+R} \Leftrightarrow \frac{L}{r+R}\frac{d(Ri)}{dt} + (R.i) = \frac{RE}{r+R}$ $\frac{L}{r+R}\frac{du_R}{dt} + u_R = \frac{RE}{r+R}$	$u_R(t)=A\left(1-e^{-\frac{t}{\tau}}\right) \Leftrightarrow u_R(t)=A-Ae^{-\frac{t}{\tau}} \Leftrightarrow \frac{du_R(t)}{dt}=\frac{A}{\tau}e^{-\frac{t}{\tau}}$ $\frac{L}{R+r}\left(\frac{A}{\tau}e^{-\frac{t}{\tau}}\right)+A-Ae^{-\frac{t}{\tau}}=\frac{RE}{R+r}$ $Ae^{-\frac{t}{\tau}}\left(\frac{L}{R+r}\frac{1}{\tau}-1\right)=\frac{RE}{R+r}-A \Leftrightarrow \begin{cases}\tau=\frac{L}{R+r}\\ A=\frac{RE}{R+r}\end{cases}$	
	Selon la loi d'additivité des tension on a $u_L + u_R = E$ $L\frac{di}{dt} + R.i = E$ $L\frac{di}{dt} + R.i = E$ $\frac{L}{R}\frac{di}{dt} + i = \frac{E}{R}$	$i(t)=A\left(1-e^{-\frac{t}{\tau}}\right) \Leftrightarrow i(t)=A-Ae^{-\frac{t}{\tau}} \Leftrightarrow \frac{di}{dt}=\frac{A}{\tau}e^{-\frac{t}{\tau}}$ $\frac{L}{R}\left(\frac{A}{\tau}e^{-\frac{t}{\tau}}\right)+A-Ae^{-\frac{t}{\tau}}=\frac{E}{R}$ $Ae^{-\frac{t}{\tau}}\left(\frac{L}{R}\frac{1}{\tau}-1\right)=\frac{E}{R}-A \Leftrightarrow \begin{cases}\tau=\frac{L}{R}\\ A=\frac{E}{R}\end{cases}$	
	Selon la loi d'additivité des tension on a $u_L + u_R = E$ $L\frac{di}{dt} + R.i = E \Leftrightarrow L\frac{di}{dt} + R.i = E$ $\frac{L}{R}\frac{di}{dt} + i = \frac{E}{R} \Leftrightarrow \frac{L}{R}\frac{d(Ri)}{dt} + (R.i) = \frac{RE}{R}$ $\frac{L}{R}\frac{du_R}{dt} + u_R = E$	$u_R(t)=A\left(1-e^{-\frac{t}{\tau}}\right) \Leftrightarrow u_R(t)=A-Ae^{-\frac{t}{\tau}} \Leftrightarrow \frac{du_R(t)}{dt}=\frac{A}{\tau}e^{-\frac{t}{\tau}}$ $\frac{L}{R}\left(\frac{A}{\tau}e^{-\frac{t}{\tau}}\right)+A-Ae^{-\frac{t}{\tau}}=E$ $Ae^{-\frac{t}{\tau}}\left(\frac{L}{R}\frac{1}{\tau}-1\right)=E-A \Leftrightarrow \begin{cases}\tau=\frac{L}{R+r}\\ A=E\end{cases}$