need help solving this

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Dear Ames,

With c(t)=0 we've got a very simple solution:
a(t)=k1*exp(−p1*t) , b(t)=k2*exp(−p2*t) k1, k2 real constants (1) .
for c(t) # 0 trying an additive form:
a(t)=k1*exp(−p1*t)+ m(t) ; b(t)=k2*exp(−p2*t)+ r(t)
bring us into 'a loop' :
m'(t)= −p1*m(t) −p3*c(t) ; r'(t)=p3*c(t)−p2*r(t) (2)
we recognize in (2) our initial equation (a−>m ,b−>r),

So we must use a different method named " constants variation " it means
in (1) k1−>k1(t) k2−>k2(t) trying this way to generalize sol.(1) ,
you compute a'(t) and b'(t) , a'(t)= d/dt (k1(t)*exp(−p1*t))= ...
We obtain after some computing:
k1(t)=int(−p3*c(t)*exp(−p1*t))+ c1 ,...and a(t),b(t),
observe c(t) might be any continuous real function,
ALAIN.
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