

### Is it Particular?

**Quiz:** The first order linear DE  $\dot{x} + kx = t$  has general solution

$$x(t) = t/k - 1/k^2 + ce^{-kt}.$$

Which of the following could be chosen as a particular solution to the DE?

- a.  $t/k - 1/k^2$
- b.  $t/k - 1/k^2 + 3e^{-kt}$
- c.  $t/k - 1/k^2 + ce^{-kt}$
- d.  $e^{-kt}$

Think about your answer and then look at the choices.

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18.03SC Differential Equations  
Fall 2011

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