

You've completed all of the work in this assignment.

18 of 22 < > 5/5 z ____

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Correct.

Find and graph or sketch the solution of the IVP. Show the details.

$$y'' - y = 20\delta(t - \frac{1}{2}) - 100\delta(t - 1), \ y(0) = 4 \ y'(0) = 1$$

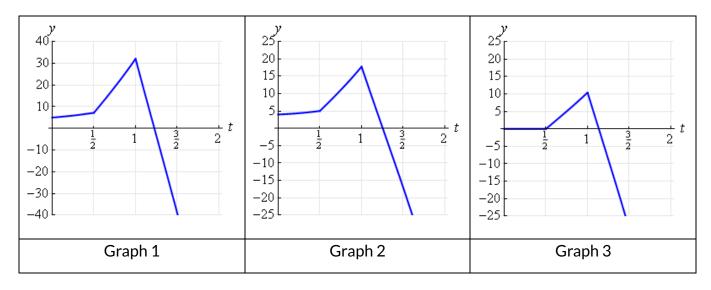
Formula 1:
$$y = 2.5e^{t} + 1.5e^{-t} + 10(e^{t-\frac{1}{2}} + e^{-t+\frac{1}{2}})u(t - \frac{1}{2}) - 50(e^{t-1} + e^{-t+1})u(t - 1)$$

Formula 2: $y = 4e^{t} + e^{-t} + 20(e^{t-\frac{1}{2}} - e^{-t+\frac{1}{2}})u(t - \frac{1}{2}) - 100(e^{t-1} - e^{-t+1})u(t - 1)$
Formula 3: $y = 2.5e^{t} + 1.5e^{-t} + 10(e^{t-\frac{1}{2}} - e^{-t+\frac{1}{2}})u(t - \frac{1}{2}) - 50(e^{t-1} - e^{-t+1})u(t - 1)$

Choose the correct formula number from the table above:



Sketch the solution:



Choose the correct graph number from the table above:



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Attempts: 1 of 3 used

Using multiple attempts will impact your score. 10% score reduction after attempt 2

