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

View Policies

Show Attempt History

✔ Your answer is correct.

Using the Laplace transform, solve:

$$y'' + 9y = r(t), \quad y(0) = 0, \quad y'(0) = 25,$$

where $r(t) = 8 \sin t$ if $0 < t < \pi$ and 0 if $t > \pi$.

NOTE: Express your answer without using the general unit step function. u.

$y(t) = \boxed{8 \ \sin(3\ t) + \sin(t)}$ if $0 < t < \pi$ ✔

$y(t) = \boxed{\dfrac{25}{3} \ \sin(3\ t)}$ if $t > \pi$ ✔

eTextbook and Media

Attempts: 1 of 3 used

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