

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

2 of 22



5 / 5



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✓ Your answer is correct.

Solve the given nonhomogeneous ODE by variation of parameters or undetermined coefficients. Give a general solution.

$$x^2 y'' - 2xy' + 2y = x^3 \cos(x)$$

- ☒  $y = c_1 x + c_2 x^2 - x \cos(x)$
- ☐  $y = x [A \cos(\ln |x|) + B \sin(\ln |x|)] + x \cos(x)$
- ☐  $y = c_1 x + c_2 x^2 + x \sin(x)$
- ☐  $y = c_1 x + c_2 x^2 + 2x^2 \sin(x) + x \cos(x)$
- ☐  $y = (c_1 + c_2 \ln |x|) x - x \cos(x)$

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**Attempts: 1 of 3 used**

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

