1. (1 point) Find the general solution to $6x^2y'' + 24xy' - 24y = 0$.
Enter your answer as $y = \ldots$. In your answer, use c_1 and c_2 to denote arbitrary constants and x the independent variable. Enter c_1 as c1 and c_2 as c2.

_____ help (equations)

2. (1 point) Find the general solution to $x^2y'' + 11xy' + 25y = 0$.
Enter your answer as $y = \ldots$. In your answer, use c_1 and c_2 to denote arbitrary constants and x the independent variable. Enter c_1 as c1 and c_2 as c2 (and use absolute values for ln if necessary).

_____ help (equations)

3. (1 point)
Find the general solution to $x^2y'' + 5xy' - 2y = 0$.

- A. $y = c_1e^{-4x} + c_2e^{-x}$
- B. $y = c_1x^{-4} + c_2x^{-1}$
- C. $y = c_1x^{(-2-\sqrt{6})} + c_2x^{(-2+\sqrt{6})}$
- D. $y = c_1x^{(-2-\sqrt{6})} + c_2x^{(-2-\sqrt{6})}\ln|x|$