

## 10.2 Exercises

**Problem 1** Use Laplace transforms to solve the initial value problem...

$$x'' + 4x' + 3x = 1, \quad x(0) = 0, \quad x'(0) = 0.$$

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**Problem 2** Use the theorem for the Laplace transform of an integral to find the inverse Laplace transform of  $F(s) = \frac{1}{s(s^2+9)}$ .