1. Find the inverse Laplace transform for each of the following:
   a) \( H(s) = \frac{2}{s(s^2 + 4s + 13)} \)
   
   b) \( H(s) = \frac{12s + 5}{s(s + 3)} \)

2. Solve the following differential equation. Use any method.
   \( \ddot{x} + 10\dot{x} + 25x = 75 \quad x(0) = 10 \text{ and } \dot{x}(0) = 4 \)