Name: _____

> The majority of the credit you receive will be based on the completeness and the clarity of your responses. Please use equal signs where appropriate and write solutions with a logical flow. Show your work, and avoid saying things that are untrue, ambiguous, or nonsensical.

1. Determine the inverse Laplace transforms of the given functions.

   (a) $F(s) = \dfrac{1}{s^2 + 4s + 8}$

   (b) $F(s) = \dfrac{3s - 15}{2s^2 - 4s + 10}$

   (c) $F(s) = \dfrac{6s^2 - 13s + 2}{s(s - 1)(s - 6)}$

   (d) $F(s) = \dfrac{s + 11}{(s - 1)(s + 3)}$

   (e) $F(s) = \dfrac{5s^2 + 34s + 53}{(s + 3)^2(s + 1)}$

   (f) $F(s) = \dfrac{7s^2 - 41s + 84}{(s - 1)(s^2 - 4s + 13)}$