

Example: Find the inverse of the Laplace transform

$$a) F(s) = \frac{4}{s} \quad \text{C}$$

$$f(t) = 4 \quad \text{C}$$

$$b) F(s) = \frac{7}{s^2+49} \quad \sqrt{49} = 7$$

$$f(t) = \sin(7t)$$

$$c) F(s) = \frac{s}{s^2+25} + \frac{3}{s^2+9}$$

$$f(t) = \cos(5t) + \sin(3t)$$

$$d) F(s) = \frac{4}{s-2} - \frac{3}{s+5}$$

$$f(t) = 4e^{2t} - 3e^{-5t}$$

$$e) F(s) = \frac{4}{s} - \frac{1}{s^2}$$

$$f(t) = 4 - t$$