

1.2 #13

$$y = c_1 e^x + c_2 e^{-x}$$

$$y' = c_1 e^x - c_2 e^{-x}$$

$$y(-1) = 5 \quad y'(-1) = -5$$

$$c_1 e^{-1} + c_2 e^{-(-1)} = 5$$

$$c_1 e^{-1} - c_2 e^{-(-1)} = -5$$

$$c_1 e^{-1} + c_2 e = 5$$

$$c_1 e^{-1} - c_2 e = -5$$

add $2c_1 e^{-1} = 0$

$$\boxed{c_1 = 0}$$

$$c_2 e = 5$$

$$\boxed{c_2 = 5/e}$$