Exercise 2

In Exercises 1 through 5, use the method described in Sec. 88 and illustrated in Example 1, Sec. 89, to find the function $f(t)$ corresponding to the given function $F(s)$.

$$F(s) = \frac{2s - 2}{(s + 1)(s^2 + 2s + 5)}.$$

Ans. $f(t) = e^{-t}(\sin 2t + \cos 2t - 1)$.