

**Exercise 10**

In Exercises 6 through 11, use the formal method, involving an infinite series of residues and illustrated in Examples 2 and 3 in Sec. 89, to find the function  $f(t)$  that corresponds to the given function  $F(s)$ .

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

$$\text{Ans. } f(t) = \frac{2}{\pi} \sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{n} \sin n\pi t.$$