

Problem 33

In each of Problems 30 through 33, find the Laplace transform of the given function. In Problem 33, assume that term-by-term integration of the infinite series is permissible.

$$f(t) = 1 + \sum_{k=1}^{\infty} (-1)^k u_k(t). \quad \text{See Figure 6.3.7.}$$

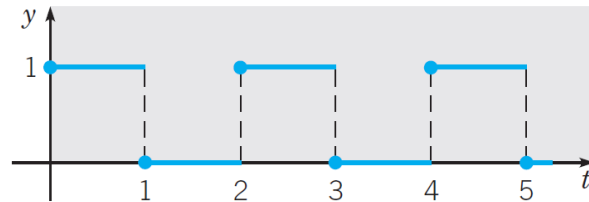


FIGURE 6.3.7 The function $f(t)$ in Problem 33; a square wave.