

**Exercise 10**

Use residues to find the Cauchy principal values of the improper integrals in Exercises 9 through 11.

$$\int_{-\infty}^{\infty} \frac{(x+1)\cos x}{x^2+4x+5} dx.$$

$$\text{Ans. } \frac{\pi}{e}(\sin 2 - \cos 2).$$