Problem 1. Compute these integrals.

(a) $\displaystyle \int \frac{4\,dx}{x^2 + 2x + 1}$

(b) $\displaystyle \int \frac{4\,dx}{(x-1)(x^2 + 2x + 1)}$

Problem 2. Compute these integrals.

(a) $\displaystyle\int \frac{5\,dx}{x^2 + 2x + 2}$

(b) $\displaystyle\int \frac{5\,dx}{(x-1)(x^2 + 2x + 2)}$