

Integrate each problem by using partial fractions.

1. $\int \frac{5x-7}{x^2-3x+2} dx$

2. $\int \frac{5x-3}{x^2-2x-3} dx$

3. $\int \frac{dx}{x^2+2x}$

4. $\int \frac{x}{x^2-2x-3} dx$

5. $\int \frac{x+4}{x^2+x} dx$

6. $\int \frac{4}{x^3-x^2-6x} dx$