

Match with the correct partial fraction decomposition

$$\int \frac{dx}{x^2 - 9}$$

$$\int \frac{x^2 + 2}{x(x+2)(x-1)} dx$$

$$\int \frac{x dx}{(x-2)^2}$$

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

$$\int \frac{A}{x} + \frac{B}{x^2} + \frac{C}{x+1} dx$$

$$\int \frac{A}{x-2} + \frac{B}{(x-2)^2} dx$$

$$\int \frac{A}{x} + \frac{B}{x+2} + \frac{C}{x-1} dx$$

$$\int \frac{A}{x+3} + \frac{B}{x-3} dx$$