

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

2.  $\int \frac{x^3 + 4x^2 + 3}{x^4 + 5x^2 + 4} dx$

3.  $\int \frac{5x^4 + 7x^2 + x + 2}{x(x^2 + 1)^2} dx$

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

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

6.  $\int \frac{dx}{\sqrt{x} - \sqrt[3]{x}}$

7.  $\int \frac{5x^2 + 8x + 6}{(x+4)(x^2+2)} dx$

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

9.  $\int \frac{x^3 + 1}{(x^2 + 1)^2(x + 1)} dx$

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

11.  $\int \frac{dx}{\sqrt{x}(x+4)}$

12.  $\int \frac{x+3}{(x+1)(x^2+x+4)} dx$