

Indefinite Integrals II - Worksheet

Compute the following indefinite integrals.

1. $\int \frac{x(6x + 28)}{x^3 + 7x^2 + 5} dx$

6. $\int x^3 \sqrt{1 + x^2} dx$

2. $\int \frac{\tan^2\left(\frac{1}{x}\right)}{x^2} dx$

7. $\int x^2 \sin(x) dx$

3. $\int x \ln(x^2) dx$

8. $\int x \tan^{-1} x dx$

4. $\int x^3 \cos(x^2) dx$

9. $\int \frac{dx}{x^2 - 4x + 8}$

5. $\int \sqrt{x} e^{\sqrt{x}} \frac{\cos(\sqrt{x})}{x} dx$

10. $\int x (\ln(\sqrt{x}))^2 dx$