

Name : _____ Score : _____ / _____

Hints: $\sin(2x) = 2 \sin(x) \cos(x)$ $\cos(2x) = \cos^2(x) - \sin^2(x)$

1. $\int x \cos(x) dx$

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

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

4. $\int \sin^2 x \cos^3 x dx$

5. $\int \frac{1}{\sqrt{1+x^2}} dx$

6. $\int_0^2 x \sqrt{4-x^2} dx$

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

8. $\int (1 + \cos x)^2 dx$

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

10. $\int \sqrt{1-x^2} dx$

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

12. $\int \tan^{-1}(2x) dx$