

Math 12002
Inverse Trig Integral
Review Problems

Evaluate the following integrals.

1. $\int_0^1 \frac{4}{x^2 + 1} dx$

2. $\int_0^{\sqrt{3}/4} \frac{1}{1 + 16x^2} dx$

3. $\int \frac{1}{\sqrt{1 - 4x^2}} dx$

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

5. $\int \frac{1}{x\sqrt{x^2 - 4}} dx$

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

7. $\int \frac{3}{x[1 + (2 \ln x)^2]} dx$

8. $\int \frac{1}{\sqrt{2 - 32x^2}} dx$