

Quiz 1

MATH 2300-002

January 19, 2010

1. $\int_0^1 x\sqrt{1-x^4} \, dx =$

2. $\int \frac{xe^x}{(x+1)^2} \, dx =$

3. $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \frac{x^2 \sin x}{1+x^6} \, dx =$

4. $\int \frac{\sqrt{x}}{x-1} dx =$

5. $\int x e^x \sin x \, dx =$

6. $\int_0^{\frac{\pi}{2}} \frac{\sin^n x}{\sin^n x + \cos^n x} \, dx =$