

MATH 236 CALCULUS 2
SECTIONS 7.1-7.4 REVIEW PROBLEMS

1. $\int_{-1}^1 \frac{e^{\tan^{-1} y}}{1+y^2} dy$

2. $\int x \sin^2 x dx$

3. $\int (1 + \sqrt{x})^8 dx$

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

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

6. $\int x^5 e^{-x^3} dx$

7. $\int \frac{1}{x\sqrt{4x+1}} dx$

8. $\int x \sqrt[3]{x+cd} x, \text{ for some fixed } c \in \mathbb{R}.$

9. $\int \sqrt{x} e^{\sqrt{x}} dx$

10. $\int \frac{e^{2x}}{1+e^x} dx$