

MA 124 – EXTRA Problems

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

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

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

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

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

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

7. $\int \frac{1}{x\sqrt{1-(\ln(x))^2}} dx$

8. $\int x^2 e^{2x} dx$

9. $\int x^2 e^{-x^3} dx$

10. $\int x^3 e^{x^2} dx$

11. $\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$

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

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

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

15. $\int \sin^3 x dx$

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

17. $\int x \cos^2 x dx$

18. $\int x \cos x dx$

$$19. \int \sin \sqrt{x} dx$$

$$20. \int x \cos(x^2) dx$$

$$21. \int x \ln(x) dx$$

$$22. \int e^x \cos x dx$$

$$23. \int e^{2x} \cos 3x dx$$

$$24. \int \ln(x) dx$$

$$25. \int \ln(x^3) dx$$

$$26. \int x \ln(x) dx$$

$$27. \int \frac{\ln(x)}{x} dx$$

$$28. \int \ln(3x) dx$$

$$29. \int \ln\left(\frac{2}{x}\right) dx$$