

Math 229 Practice

ANTI DIFFERENTIATION

Find the anti-derivatives of the functions

4. $4x^3$

5. x^5

6. $3x^2 + 4x - 2$

7. $4x^3 + 7x^2 - 6x + 1$

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

9. $\cos x + 1$

10. $\frac{1}{(\cos x)^2}$

11. $\sin x - x$

12. $3t(t^3 + 1)$

13. $x\sqrt{x}$

14. $3(3x + 1)^2$

15. $3t(t^3 + 4)^2$

16. $\frac{3x^3 - 2x^2 + x}{x}$

17. $\frac{3x^{\frac{1}{2}} + x^3 - x^4}{x}$

18. $x^3(x + 1)(3x + 2)$

19. $\frac{\sqrt{x+1}}{\sqrt{x}}$

20. $x + \frac{1}{x^2}$