

MAT 181 Section 050
Homework for Section 4.9

Find all antiderivatives of each of the following. Check your work by differentiating your solutions.

1. $f(x) = 3x^5 - 5x^9$

2. $f(x) = 4\sqrt{x} - \frac{4}{\sqrt{x}}$

3. $f(x) = (3x + 1)(4 - x)$

4. $f(x) = \frac{4x^4 - 6x^2}{x}$

5. $f(y) = \sin 2y + \cos 3y$

6. $f(\theta) = \sec^2 \theta + \sec \theta \tan \theta$

7. $f(\theta) = \sec 4\theta \tan 4\theta$

8. $f(y) = \frac{1}{2y}$

9. $f(x) = \frac{6}{\sqrt{25-x^2}}$

10. $f(t) = \frac{t+1}{t}$

11. $f(x) = e^{x+2}$