

MA 2320: Quiz 5

Name: _____

1. $\int \sin(2x) \cos^2(2x) dx$
2. $\int \sin^{1/2}(3x) \cos^3(3x) dx$
3. $\int \sin^2(2x) dx$
4. $\int \sin^2(3x) \cos^2(3x) dx$
5. $\int \frac{1}{4+3x^2} dx$
6. $\int \frac{1}{x\sqrt{1+x^2}} dx$
7. $\int \frac{1}{\sqrt{9x^2-4}} dx$
8. $\int \frac{x^2}{\sqrt{9-x^2}} dx$ Hint use $\sin(2\theta) = 2\sin(\theta)\cos(\theta)$

Some u-sub

9. $\int \tan(x) dx$
10. $\int \cot(x) dx$
11. $\int \sec(x) dx$ Hint use $\sec(\theta) = \frac{\sec^2(\theta) + \sec(\theta)\tan(\theta)}{\sec(\theta) + \tan(\theta)}$
12. $\int \csc(x) dx$