

Math 2320 - Some Trigonometric Integrals

1 Trigonometric Integrals

1. $\int \sin^2(3x)dx$
2. $\int \sin^2(3x) \cos^3(3x)dx$
3. $\int \sin^2(2x) \cos^2(2x)dx$
4. $\int \cos^3(7x) \sin^{1/2}(7x)dx$
5. $\int \cos^{-3}(x) \sin^3(x)dx$

2 Trigonometric Substitution

6. $\int \frac{1}{\sqrt{4-x^2}}dx$
7. $\int \frac{1}{x\sqrt{9-x^2}}dx$
8. $\int \frac{1}{\sqrt{x^2+7}}dx$
9. $\int x^3 \sqrt{5-x^2}dx$