

## In-Class Assignment 7: Trigonometric Substitutions

MATH 142

**Directions:** Work neatly on this page. Your group will hand in one write-up with everyone's name.

1.  $\int \sqrt{4-x^2} dx$

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

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

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

5.  $\int \frac{1}{\sqrt{x^2+16}} dx$

6.  $\int x \sqrt{1-x^4} dx$

7.  $\int \frac{x}{\sqrt{x^2-9}} dx$