In-Class Assignment 7: Trigonometric Substitutions

**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. \(\int \frac{x}{\sqrt{x^2 - 9}} \, dx\)