

## HW #7 Final Answers

1.  $\frac{\sin^3 x}{3} - \frac{\sin^5 x}{5} + C$

2.  $\frac{8}{15}$

3.  $\frac{\pi}{4}$

4.  $\frac{\pi}{16}$

5.  $\frac{x^2}{4} - \frac{x \sin(2x)}{4} - \frac{\cos(2x)}{8} + C$

6.  $\frac{2}{15}$

7.  $\frac{9}{2} \arcsin\left(\frac{x}{3}\right) + \frac{x}{2} \sqrt{9-x^2} + C$

8.  $\frac{1}{16} \left[ \frac{x}{\sqrt{x^2+4}} - \frac{1}{3} \left( \frac{x}{\sqrt{x^2+4}} \right)^3 \right] + C$

9.  $\frac{x^2}{2} \arcsin x - \frac{\arcsin x}{4} + \frac{x \sqrt{1-x^2}}{4} + C$