

HW #8 Final Answers

1. $\frac{1}{6} \left[\operatorname{arcsec} \left(\frac{x}{3} \right) - \frac{3\sqrt{x^2-9}}{x^2} \right] + C$

2. $\frac{1}{16} \left[\frac{\sqrt{x^2-16}}{x} \right] + C$

3. $\arcsin \left(\frac{x+2}{\sqrt{8}} \right) + C$

4. $\frac{\pi}{6\sqrt{3}}$

5. $2 \left[\arcsin \left(\frac{x+1}{2} \right) + \frac{(x+1)\sqrt{4-(x+1)^2}}{4} \right] + C$

6. $\frac{\pi}{\sqrt{3}}$

7. $-\ln 10$

8. $\ln \left(\frac{3}{8} \right)$ or $-\ln \left(\frac{8}{3} \right)$

9. $\ln |x-1| - \frac{1}{2} \ln |x^2+9| - \frac{1}{3} \arctan \left(\frac{x}{3} \right) + C$