

## Homework 13 Final Answers

1(a) and (b)  $-\frac{3}{2}$

11.  $-\frac{1}{\sin x} + C$

2.  $-\frac{(1-x^3)^8}{24} + C$

12.  $\frac{2}{3} \sin\left(9 + x^{\frac{3}{2}}\right) + C$

3.  $\frac{-1}{35(x^5-3)^7} + C$

13.  $\frac{1}{2(\cos x - \sin x)^2} + C$

4.  $\frac{1}{3} \sec(3x) + C$

14.  $-\frac{\sqrt{3}}{4}$

5.  $\frac{1}{3} \sin(x^3 - 6) + C$

15.  $9$

6.  $-\tan\left(\frac{1}{x}\right) + C$

16.  $\frac{1}{3}$

7.  $-\frac{\cos^5 x}{5} + C$

17. Answer in words

8.  $-\frac{1}{3} (4-x^2)^{\frac{3}{2}} + C$

18(a) Displacement  $-\frac{9}{2}$

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

18(b) Total Distance  $\frac{15}{2}$

10.  $-2 \cos \sqrt{x} + C$