

Homework #3 Final Answers
Section 6.6

1(a). $\frac{\pi}{6}$

57. $2x + 3 \arctan x + C$

7. $\frac{2}{\sqrt{5}}$

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

11. $\sqrt{1-x^2}$

61. $\frac{\pi^2}{72}$

13. $\frac{x}{\sqrt{1+x^2}}$

63. $\arctan x + \frac{1}{2} \ln(1+x^2) + C$

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

or $\ln|1+x^2|$
 \oplus

23. $\frac{2 \tan^{-1} x}{1+x^2}$

65. $\ln|\sin^{-1} x| + C$

25. $\frac{1}{\sqrt{-x^2-x}}$

69. $2 \arctan \sqrt{x} + C$

27. $\sin^{-1} x$

39. $\frac{\pi}{6}$