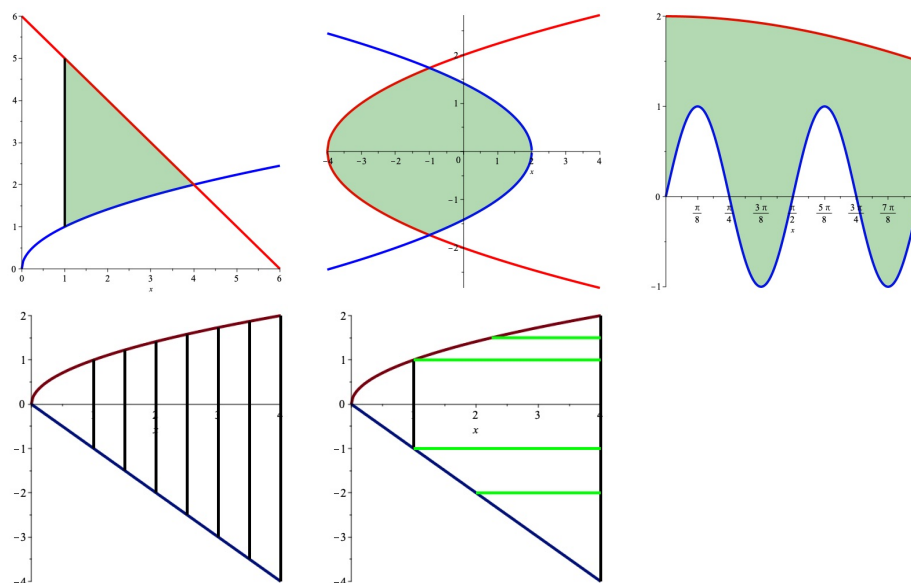


MATH 122: Calculus II
Some Hints and Answers for Assignment 5
 I: Section 5.1: 2, 13, 23, 27

These pictures may be helpful:



Exercise 2: Area of region $= \int_1^4 (6 - x) - \sqrt{x} \, dx$.

Exercise 13: Area is $8\sqrt{3}$

Exercise 23: Vertical Strips. Answer is $\pi + \frac{3}{2}\sqrt{3}$

Exercise 27 : Vertical Strips only require one definite integral; you need 3 integrals for horizontal strips.

II: Section 6.1: 1, 6, 11, 13

Make Sure You Show All Intermediate Steps

Exercise 1: $f^{-1}(x) = \frac{x-5}{3}$.

Exercise 6: $f^{-1}(x) = \frac{2x}{x-4}$.

Exercise 11: $f^{-1}(x) = (x-1)^3$

Exercise 13: $f^{-1}(x) = \frac{x-b}{a}$.