Section 6.6: Area Between Two Curves
Section Objectives:

- Use definite integrals to find the area between two curves by integrating the top minus the bottom.
- Find the area of a curve under the x-axis.
- Be careful with determining which is the top curve an which is the bottom.

Practice Problems

1. Find the area between $f(x) = x^2$ and $g(x) = x^3$ from $x = 0$ to $x = 1$.

2. Find the area between $f(x) = x$ and $g(x) = x^2$ from $x = 0$ to $x = 3$. Be careful with determining which curve is the bottom and which is the top.

3. Find the area between $f(x) = x + 2$ and $g(x) = \sqrt[3]{x}$ from $x = -1$ to $x = 1$.

More Practice from Textbook 6.6: You should do as many problems from each set (1-36, 41, 42, 50-53), as needed until you are comfortable with these techniques. 50-53 are good practice for application problems. (We are skipping Lorentz Curves.)