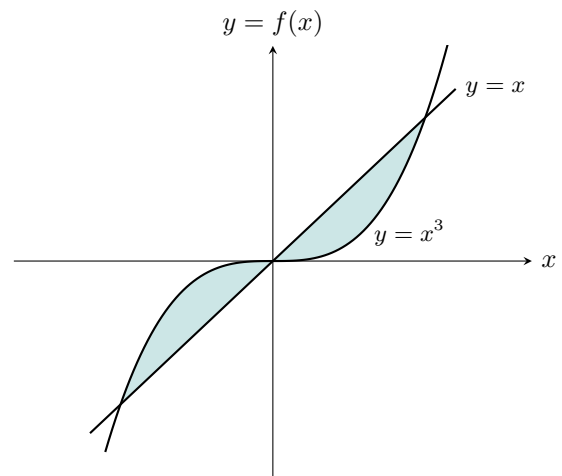


**Worksheet 3****Area Between Curves & Volume by Slicing**

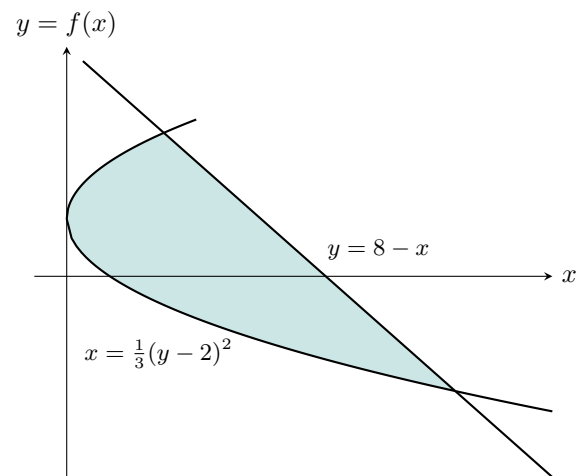
MATH 2205, Fall 2018

**Area Between Curves**

1. Find the area of the shaded region in Figure 1.

**Figure 1**

2. Find the area of the shaded region in Figure 2.

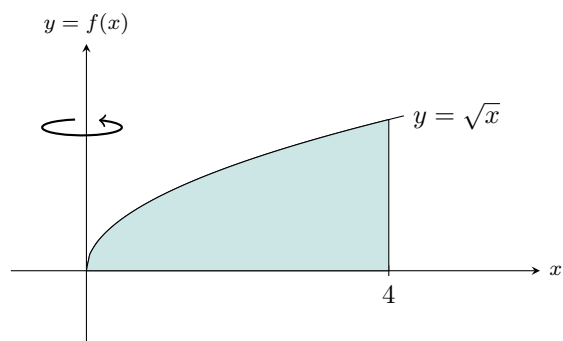


**Figure 2**

**Volume by Slicing**

3. Find the volume of the solid obtained when the shaded region in Figure 1 is revolved about the  $y$ -axis.

4. Find the volume of the solid obtained when the shaded region is revolved about the  $y$ -axis in Figure 3.



**Figure 3**