

**Math 152-37, Mr. Church, Homework 10**

Due in class on Friday, November 7.

Please staple your homework.

As I mentioned in class, this homework assignment is not part of the second midterm.

1. Exercise 6.1.30.
2. Exercise 6.1.35.
3. Exercise 6.2.2.
4. Exercise 6.2.8.
5. Exercise 6.2.18.
6. Exercise 6.2.52.
7. Find the volume of the solid generated by revolving the region in the first quadrant<sup>1</sup> between  $y = x^3$  and  $y = 2x$ :
  - (a) about the  $x$ -axis, and
  - (b) about the  $y$ -axis.

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<sup>1</sup>The first quadrant is the region of the plane where  $x \geq 0$  and  $y \geq 0$ .