

Volumes of Solids of Revolution - Disc and Shell Methods Homework – Day 1

Sketch, set up the integral, and find the volume of the solid swept by the indicated region.

1. Bounded by $2x + y = 4$, $y = 0$, and $x = 0$
about the y-axis using the disc method.

2. 1st quadrant, bounded by $y = 4 - x^2$, $y = 0$, $x = 0$
about the x-axis using the disc method.

3. Bounded by $y = x^2$, $y = 4$, and $x = 0$
about the y-axis using the disc method.

4. Bounded by $y = x^2$ and $y = 2x$
about the x-axis using the disc method.

Volumes of Solids of Revolution - Disc and Shell Methods Homework – Day 2

Sketch, set up the integral, and find the volume of the solid swept by the indicated region.

2. Bounded by $2x + y = 4$, $y = 0$, and $x = 0$
about the y-axis using the shell method.

2. 1st quadrant, bounded by $y = 4 - x^2$, $y = 0$, $x = 0$
about the x-axis using the shell method.

3. Bounded by $y = x^2$, $y = 4$, and $x = 0$
about the y-axis using the shell method.

4. Bounded by $y = x^2$ and $y = 2x$
about the x-axis using the shell method.