

Find the following volume of the solid of revolution with respective regions and axis.

1. Bounded by $y = \frac{4}{x}$, $x = 1$, $x = 4$ and $y = 0$; rotating about $y - axis$.
2. Bounded by $y = x^2$, $x = 2$ and $y = 0$; rotating about $y - axis$.
3. Bounded by $y = 4 - x^2$, $x = 0$ and $y = 0$; rotating about $y - axis$.
4. Bounded by $y = \frac{1}{4}x^2 + 2$, $x = 2$ and $y = 0$; rotating about $y - axis$.
5. Bounded by $y = x^2$, and $y = 2x$; rotating about $y - axis$.
6. Bounded by $x = y^2$, $y = 2$ and $x = 0$; rotating about $x - axis$.
7. Bounded by $x = \sqrt{2y} + 1$, $y = 2$ and $x = 0$; rotating about $x - axis$.
8. Bounded by $x = y^2$, $y = 2$ and $x = 0$; rotating about $y = 2$.
9. Bounded by $x = \sqrt{2y} + 1$, $y = 2$ and $x = 0$; rotating about $y = 3$.
10. Bounded by $x = \sqrt{y}$ and $x = \frac{y^3}{32}$; rotating about $x - axis$.
11. Bounded by $x = \sqrt{y}$ and $x = \frac{y^3}{32}$; rotating about $x = 4$.