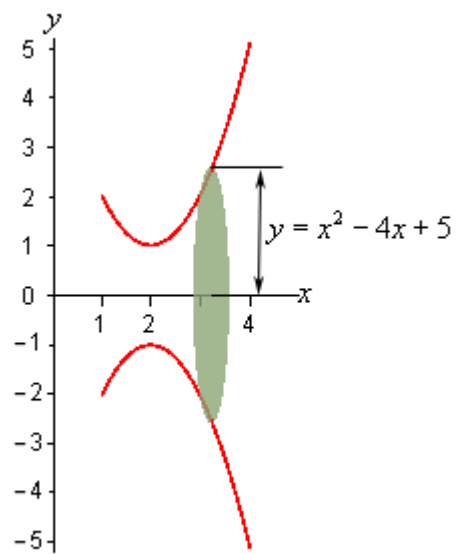
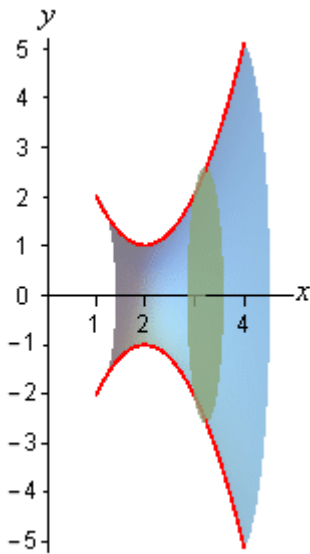
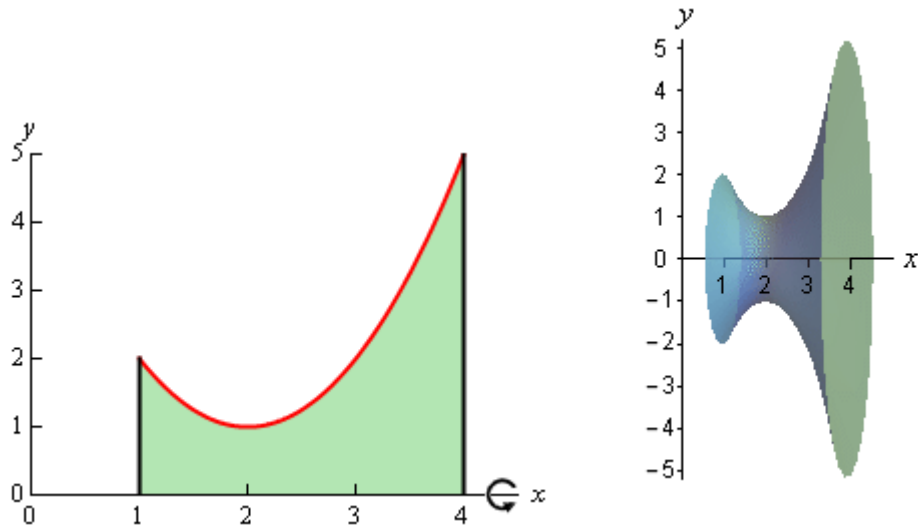
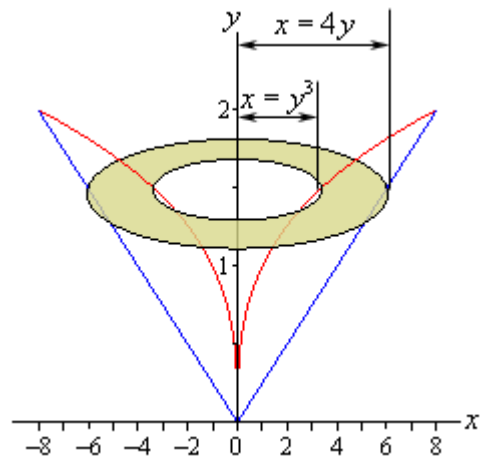
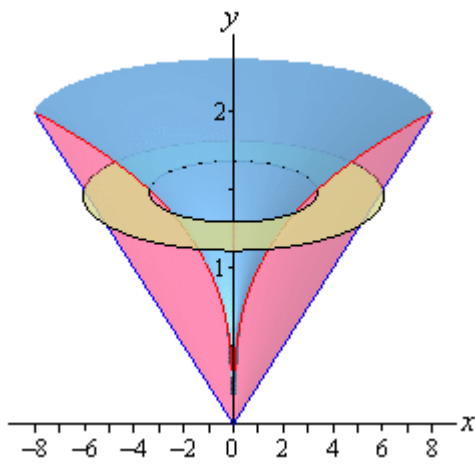
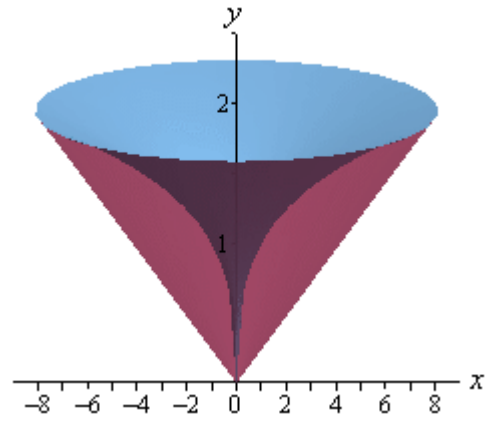
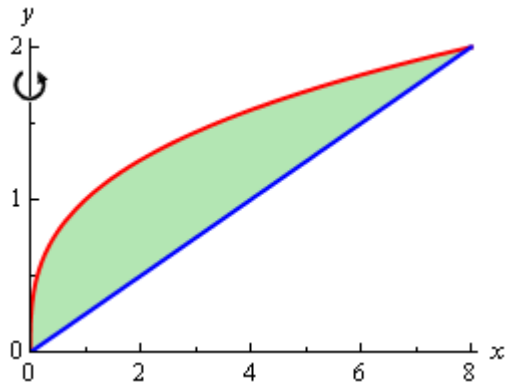


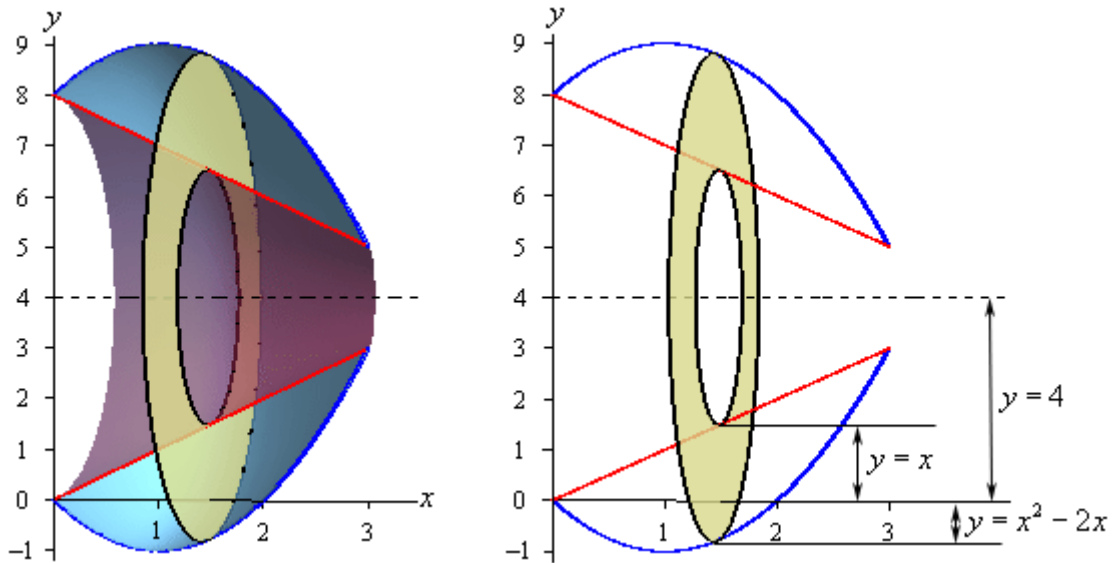
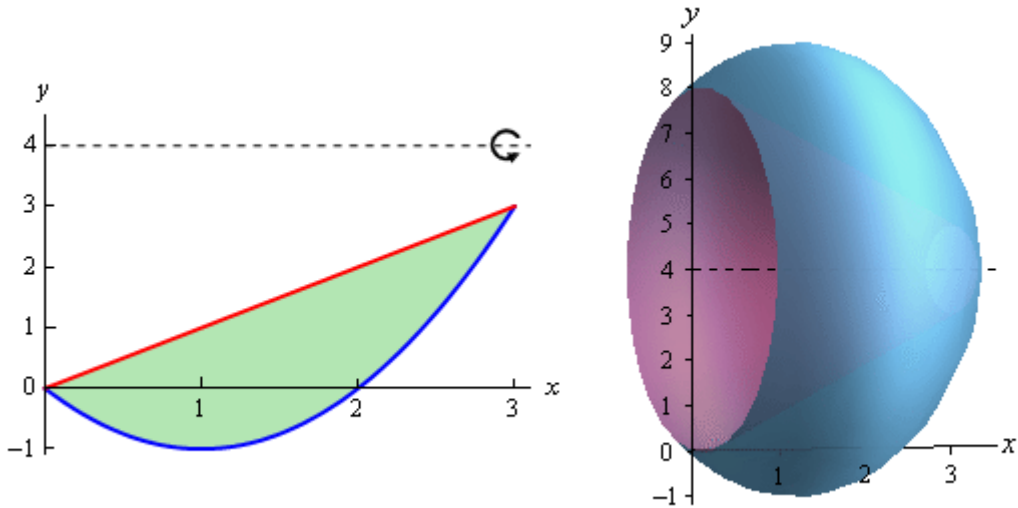
**Example** : Determine the volume of the solid obtained by rotating the region bounded by  $y = x^2 - 4x + 5$ ,  $x = 1$ ,  $x = 4$ , and the  $x$ -axis about the  $x$ -axis.



**Example :** Determine the volume of the solid obtained by rotating the portion of the region bounded by  $y = \sqrt[3]{x}$  and  $y = \frac{x}{4}$  that lies in the first quadrant about the  $y$ -axis.



**Example** : Determine the volume of the solid obtained by rotating the region bounded by  $y = x^2 - 2x$  and  $y = x$  about the line  $y = 4$ .



**Example** : Determine the volume of the solid obtained by rotating the region bounded by  $y = 2\sqrt{x-1}$  and  $y = x-1$  about the line  $x = -1$ .

