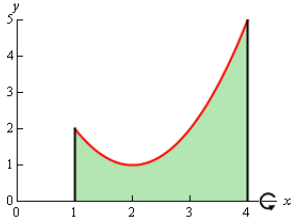
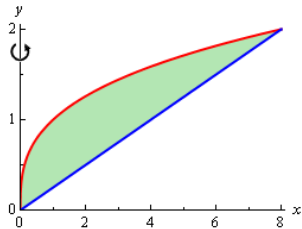


6.2 Practice

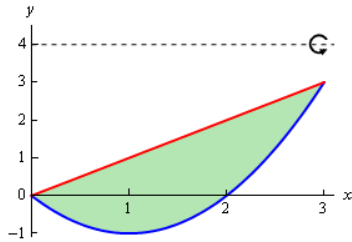
1. Determine the volume of the solid obtained by rotating the region bounded by $y = x^2 - 4x + 5$, $x = 1$, $x = 4$ and the x -axis about the x -axis.



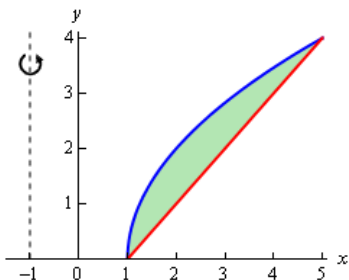
2. Determine the volume of the solid obtained by rotating the portion of the region bounded by $y = \sqrt[3]{x}$ and $y = \frac{x}{4}$ that lies in the first quadrant about the y -axis.



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



4. 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 $x = -1$.



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

a. $y = 0$ (x -axis)

b. $x = 0$ (y -axis)

c. $x = 4$

d. $x = -1$

e. $y = -2$

f. $y = 6$