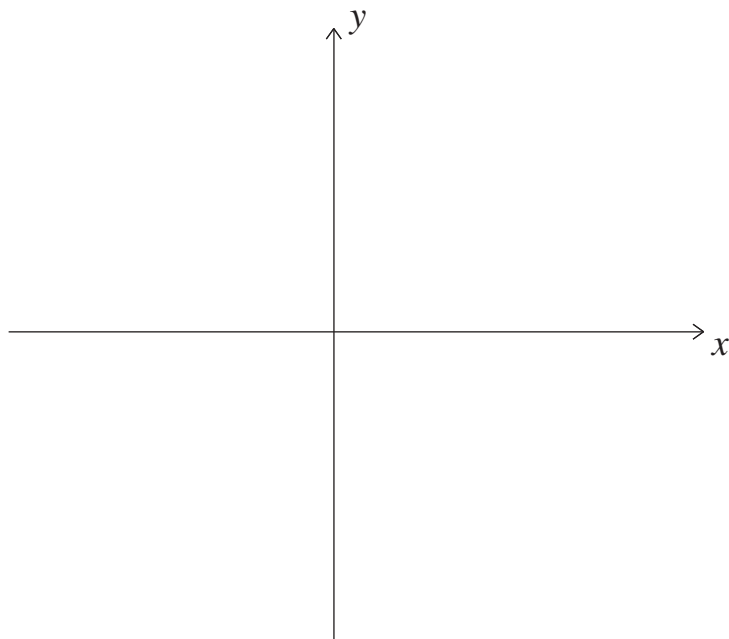


Quiz**Name**

1. The definite integral $\pi \int_2^7 (x^2 + 2)^2 dx$ represents the volume of a solid. Draw this solid carefully on the axis system below. Compute the volume of the solid.



2. The graph of the equation $x^2 + 6x + y^2 - 4y = 36$ is a circle. Find the center and the radius of this circle (by completing squares). Sketch the circle. Then make use of the graph to evaluate the definite integral $\int_{-10}^4 \sqrt{40 - x^2 - 6x} dx$.

