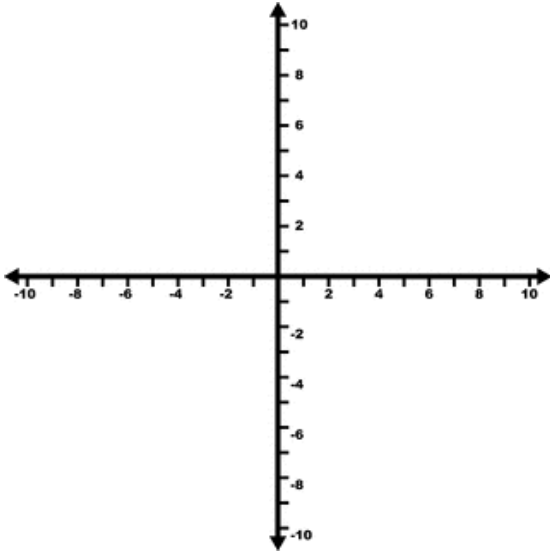NAME_____DATE_____PER_____

SOLIDS OF REVOLUTION

1. Sketch and shade the region bounded by the lines y = -6, y = -4, x = -2, x = 8.

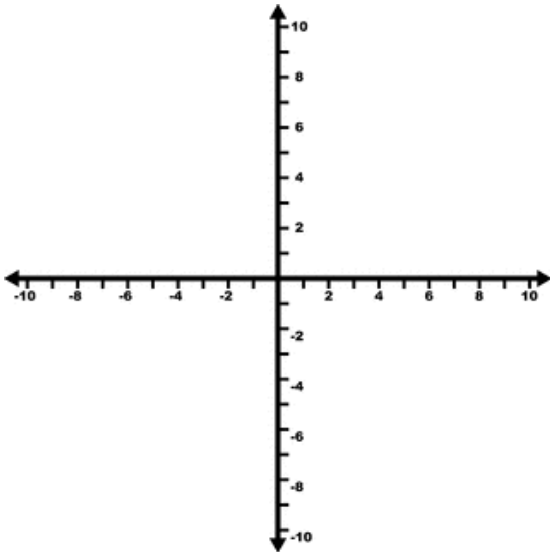| a. | b. Determine the perimeter of the region. |
| | c. Determine the area of the region. |
| d. Describe the geometric solid formed by revolving the region about the x-axis. Sketch this geometric solid. | e. Determine the volume of the geometric solid. |

2. Sketch and shade the region bounded by the lines y = 2x + 8, y = 0, x = 0.

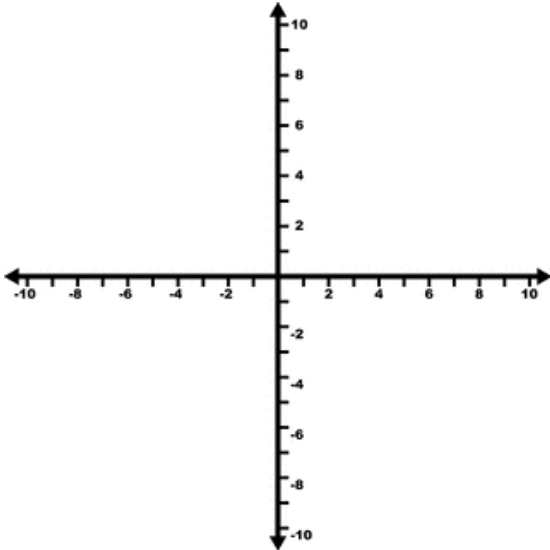| a. | b. Determine the perimeter of the region. |
| | c. Determine the area of the region. |

d. Describe the geometric solid formed by revolving the region about the x-axis. Sketch this geometric solid.

e. Determine the volume of the geometric solid.	f. Determine the surface area of the geometric solid.

3. Sketch and shade the region bounded by the curve $y = \sqrt{25 - x^2}$ and the line $y = 0$.

a.	b. Determine the perimeter of the region.
	c. Determine the area of the region.

d. Describe the geometric solid formed by revolving the region about the x-axis. Sketch this geometric solid.

e. Determine the volume of the geometric solid.	f. Determine the surface area of the geometric solid.