1. Find the area of the region between $y = x^2$ and y = x + 2 from x = 0 to x = 1.

2. Find the area of the region bounded by the line y = x and the parabola $y = 6 - x^2$.

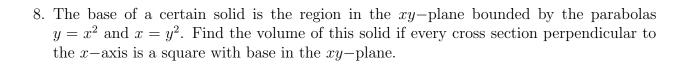
3. Find the area of the region bounded by $y = x^3$ and y = x.

4. Find the area of the region between $x = y^2$ and $x = 32 - y^2$ from y = -2 to y = 2.

5. Find the area of the region between lines x = -2y + 5, x = y - 1 and y = 0.

6. Find the area of the region between $x = -y^2$ and x = y - 2.

7.	The base of a certain solid is a circle with diameter AB of length $2a$. the solid if each cross section perpendicular to AB is a square.	Find the volume of



9.	Find the volume of a frustum of a pyramid with square base of side b , square top of side a and height b .	de



11. Verify the formula $V = \frac{1}{3}\pi r^2 h$ for the volume of the circular cone with base radius r and height h.

12. Find the volume of the solid generated by rotating the region bounded by $y = 1 - x^2$, lines x = -1 and x = 1 about the line y = 2.

