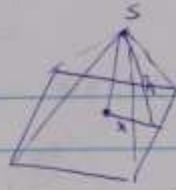


3.64
6



2x p 8cm 8/3 it 100)

h → 123.26 7.26

$$200 = (2x)^2 + 4 \cdot \frac{2x \cdot h}{2} = 4x^2 + 4xh$$

$$h = \frac{50 - x^2}{x}$$

$$V = \frac{1}{3} \cdot (2x)^2 \cdot \sqrt{h^2 - x^2} = \frac{4x^2}{3} \sqrt{\frac{2500 - 100x^2 + x^4}{x^2} - x^2} =$$
$$= \frac{4x^2}{3} \sqrt{\frac{2500 - 100x^2}{x^2}} = \frac{4x}{3} \sqrt{2500 - 100x^2} = \frac{40x}{3} \sqrt{25 - x^2}$$

$$V' = \frac{40}{3} \sqrt{25 - x^2} - \frac{40x}{3} \cdot \frac{-2x}{2\sqrt{25 - x^2}} = \frac{40}{3\sqrt{25 - x^2}} (25 - x^2 + x^2)$$

$$0 = 25 - \cancel{x^2} \rightarrow x^2 = \frac{25}{2} \quad \frac{25}{2}$$

$$V(\sqrt{12.5}) = \frac{40\sqrt{12.5}}{3} \sqrt{12.5} = \frac{40 \cdot 12.5}{3} = \frac{500}{3}$$