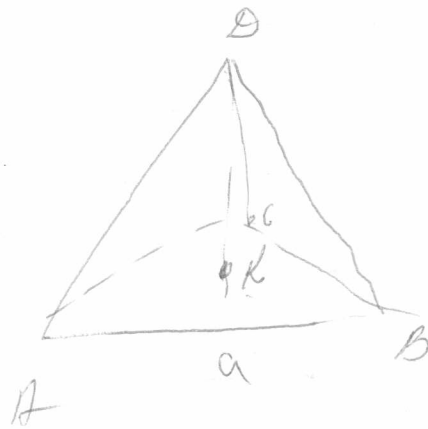




$$V = \frac{1}{3} B \cdot h$$

$$V = \frac{1}{3} \cdot B \cdot h =$$

$$= \frac{1}{3} a^2 \cdot \frac{\sqrt{3}}{4} \cdot h =$$

$$= \frac{1}{12} a^2 h \sqrt{3}$$

$$AB = a$$

$$B = S_{\triangle ABC} = \frac{a^2 \cdot \sqrt{3}}{4} = \frac{9^2 \cdot \sqrt{3}}{4} = \frac{81\sqrt{3}}{4}$$

$$V = \frac{1}{3} B \cdot h = \frac{1}{3} \cdot \frac{81\sqrt{3}}{4} \cdot \frac{27}{2} =$$

$$= \frac{27 \cdot 3 \cdot \sqrt{3}}{2} = \frac{81\sqrt{3}}{2}$$