

Ha a kúp oldalvonala l , a gömb sugara r , akkor

$$v = \frac{4}{3}r^3\pi,$$

miből

$$r = \sqrt[3]{\frac{3v}{4\pi}},$$

és

$$3r = 3\sqrt[3]{\frac{3v}{4\pi}} = \frac{l}{2}\sqrt{3},$$

miből

$$l = \frac{6\sqrt[3]{\frac{3v}{4\pi}}}{\sqrt{3}}$$

s így a palást

$$P = \frac{l^2\pi}{2} = 6\pi\sqrt[3]{\left(\frac{3v}{4\pi}\right)^2} = 6\pi\sqrt[3]{\left(\frac{3v}{4}\right)\pi} = 6\sqrt[3]{75^2 \cdot \pi} = 156,28 \text{ cm}^2.$$

(Neumann Frida, Budapest.)