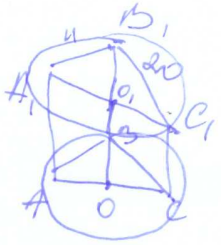

AA_1C_1C – квадрат

$S_{цилиндра} = 2\pi R(R+h)$

$\angle ABC = 90^\circ$

Т.к. $\triangle ABC$ – прямоуг.

$AC^2 = AB^2 + BC^2$

$AC^2 = 11^2 + 20^2$

$AC^2 = 121 + 400 = 521$

$AC = \sqrt{521}$

Т.к. AA_1C_1C – квадр.

$AA_1 = A_1C_1 = C_1C = AC = \sqrt{521} \Rightarrow$

O_1O – высота цилиндра $= \sqrt{521}$

$R = AO = \frac{\sqrt{521}}{2}$

$S_{цил.} = 2\pi R(R+h)$

$S = 2\pi \cdot \frac{\sqrt{521}}{2} \cdot \left(\sqrt{521} + \frac{\sqrt{521}}{2}\right)$

$S = \frac{2\pi\sqrt{521}}{2} \cdot \left(\frac{2\sqrt{521} + \sqrt{521}}{2}\right)$

$S = \pi\sqrt{521} \cdot \frac{3\sqrt{521}}{2} = \frac{3\pi \cdot 521}{2} = \frac{1563\pi}{2} = 781{,}50\pi\ (см^2)$