№ 18.

$y = \frac{1}{\sqrt{2x^2+x+1}}$, $x = 1{,}016$

$f(x_0+\Delta x) \approx f(x_0) + f'(x_0)\Delta x$

$x_0 = 1$; $\Delta x = 0{,}016$; $y' = -\frac{1}{2}\cdot(2x^2+x+1)^{-\frac{3}{2}} \cdot (4x+1)$; $y'(x_0) = -\frac{5}{16}$

$y(1{,}016) \approx \frac{1}{2} + \left(-\frac{5}{16}\right)\cdot 0{,}016 =$

$= \frac{1}{2} - \frac{8}{16}\cdot\frac{16}{1000_{200}} = \frac{1}{2} - \frac{1}{200} = \underline{0{,}495}$

Отвес: 0,495.