№2. $z = \arcsin u - v$; $u = \frac{x}{y}$; $v = \ln y$; $x = 0$, $y = 1$; $z'_x - ?$; $z'_y - ?$

$z = F(x; y)$

$$z'_x = F'_u \cdot u'_x + F'_v \cdot v'_x = \frac{1}{\sqrt{1-u^2}} \cdot \frac{1}{y} - 0 = \frac{1}{y\sqrt{1-u^2}}$$

$$z'_x\Big|_{(0;1)} = \frac{1}{1\sqrt{1-0}} = 1$$

$$z'_y = F'_u \cdot u'_y + F'_v \cdot v'_y = -\frac{1}{\sqrt{1-u^2}} \cdot \frac{x}{y^2} - \frac{1}{y}$$

$$z'_y\Big|_{(0;1)} = -\frac{1}{\sqrt{1-0}} \cdot \frac{0}{1} - 1 = -1$$

Ответ: $z'_x\big|_{(0;1)} = 1$; $z'_y\big|_{(0;1)} = -1$.