

15. Дано $x^2u - y^2v = 1$, и $x + y = uv$. Найти $(\partial x/\partial u)_v$, $(\partial x/\partial u)_y$.

Ответ

$$7.15 \quad (\partial x/\partial u)_v = (2yv^2 - x^2)/(2yv + 2xu),$$
$$(\partial x/\partial u)_y = (x^2u + y^2v)/(y^2 - 2xu^2)$$