

## Math.Econ.Anal.Quiz.3. 15.nov.9.

1. Compute  $\int 2x \sin(-3x) dx$ .
2. Solve the following differential equation!  $y'(x) = 2y(x)$ ,  $y(0) = 9$ .
3. Compute the  $f'_x, f'_y$  partial derivatives of the following function:  $x^3 + x^2y + y$ .
4. Find the critical point of the following function and determine its type!  $x^2 - xy - 2x$ .