

Mathematics in Economics – lecture 8 – repetition – 10 points reward

1. Find extremes point of the function $y = 4x^3 - 6x^2 + 15$. 3 points

2. Draw in the x - y plane the domain of the function of two variables: $f(x,y) = \log(x^2 + y^2 - 64)$. 2 points

3. Find partial derivatives of the first and second order of the function: $f(x,y) = 4x^3 + 6xy + \sin y$ 2 points

4. Find extremes of the function of two variables: $f(x,y) = x^3 + y^3 - 3xy$. 3 points