

Master of Finance - Assessment Test 2009

1 Economic - Test

Please answer two of the three questions:

1. Question (2 points)

The financial crisis has been discussed very intensively.
Has your country been affected by the financial crisis?
Please describe and explain the effects.

2. Question (2 Points)

Please describe and explain an innovative financial product.

3. Question (2 points)

Is the automotive industry of systemic relevance for welfare of the global economy? Please describe and explain the effects.

2 Mathematic - Test

Please answer all questions of the Mathematic Test.

(1) Please calculate the nulls of the following function using the formula $x^2 + px + q = 0$ and $x_{1,2} = -\frac{p}{2} \pm \sqrt{\left(\frac{p}{2}\right)^2 - q}$ (1 point)

$$y = x^3 - 3x^2 + 2x$$

(2) Calculate the relativ extremums of the above mentioned function (1 point)

(3) Solve the following equations using matrix calculus or by substituting y_i in each equation and solving for y_i (1 point)

$$y_1 = \alpha_{12}y_2 + \sum_{j=1}^2 \beta_{1j} x_j$$

$$y_2 = \alpha_{21}y_1 + \sum_{i=1}^2 \beta_{2i} x_i$$

(4) What is the result of the following function (1 point):

$$\lim_{x \rightarrow \infty} \frac{\partial x^{-1}}{\partial x} =$$