# TIØ4116, Exercise 12.

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## Task 1

**A** Ewert is a risk taking investor. He is willing to take big risks to get big rewards. His investments will go for the biggest reward independent of the risk.

**B** From the indifference curve we can see that Ewert has to maximise risk to maximise profit. As Ewert is risk averse, he will choose the 'Fiskeselskapet AS' stock.

mage example.

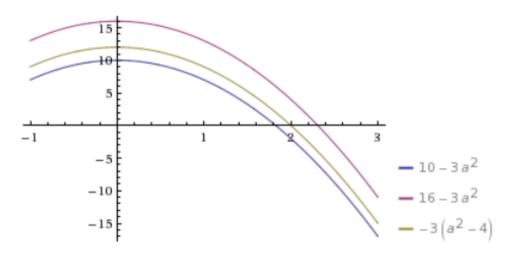
- C Ewert will get the highest utility by sticking with 'Fiskeselskapet', but he will increase the assured rate of return by using the bank for 20% of his money.
- **D** The utility will decrease. The amount of decrease utility varies with the amount of money in the bank. A new portfolio would have less money in the bank, and more money in stocks.
- **E** Market equilibrium assumes that the price of all stocks are proportional with the number of stocks. Giving us Steamboat AS: 2115 stocks, Fiskeselskapet AS: 3333 stocks.

### Task 2

A Portfolio: Ralex AB + Frygas AB, 50% of each.

Input interpretation:

Plot:



The figure shows the utility function with the three stock as input on the y axis.

**B** The second option will be chosen, as it gives the highest rate of return. The portfolio will now consist of 60% Ralex AB, 20% Frygas AB and 20% of the new option of 4.7% return.

 ${f C}$  If the expected rate of return has to be 7%, the only stock to have in the portfolio is Ralex AB.