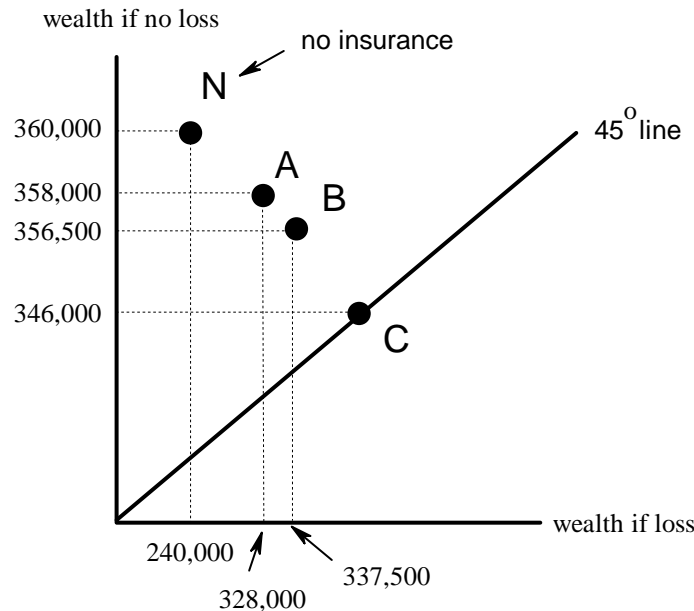


HOMEWORK # 1 (for due date see the web page)

Consider the following diagram, where point N denotes no insurance. The probability of loss is 10%.



- What is the expected wealth in the case of no insurance?
- What is the expected loss in the case of no insurance?
- What are the premium and deductible associated with contract A?
- What are the premium and deductible associated with contract B?
- What are the premium and deductible associated with contract C?
- What is the insurance company's expected profit from contract A?
- What is the insurance company's expected profit from contract B?
- What is the insurance company's expected profit from contract C?
- If the agent is offered only contract C, will she sign it? Explain your answer.
- Give the premium and deductible of a full-insurance contract, call it contract D, that would make a risk-neutral individual indifferent between purchasing contract D and not insuring.