TD N=1

Question :

What does it mean to say that a person is risk averse? Why are some people likely to be risk averse, while others are risk seeking?

Exercise 1 :

Consider an investment with three possible outcomes: \$100 will be received with probability 0.1, \$50 with probability 0.2, and \$10 with probability 0.7.

a. What is the expected value of the investment?

b. What is the variance of the outcomes of the investment?

c. What would a risk-neutral person pay to play the investment?

Exercise 2 :

Consider the following three investments:

Investment *A*		Investment *B*		Investment *C*	
Outcome	Probability	Outcome	Probability	Outcome	Probability
20	3/15	19	1/5	18	1/4
18	5/15	10	2/5	16	1/4
14	4/15	5	2/5	12	1/4
10	2/15			8	1/4
6	1/15				

Expected utility theory

Suppose the investor uses the following utility function to assign values to outcomes: $U(W) = 4W - (1/10)W^2$

- **What would be the expected utility for the three investment ?**