1. One way to measure investors' risk aversion is by comparing their certainty equivalent. Economists define the certainty equivalent return r_{CE} of a risky portfolio as the sure return that an investor would be willing to accept instead of the risky portfolio. If you are more risk averse, what do you expect your r_{CE} to be smaller or larger?

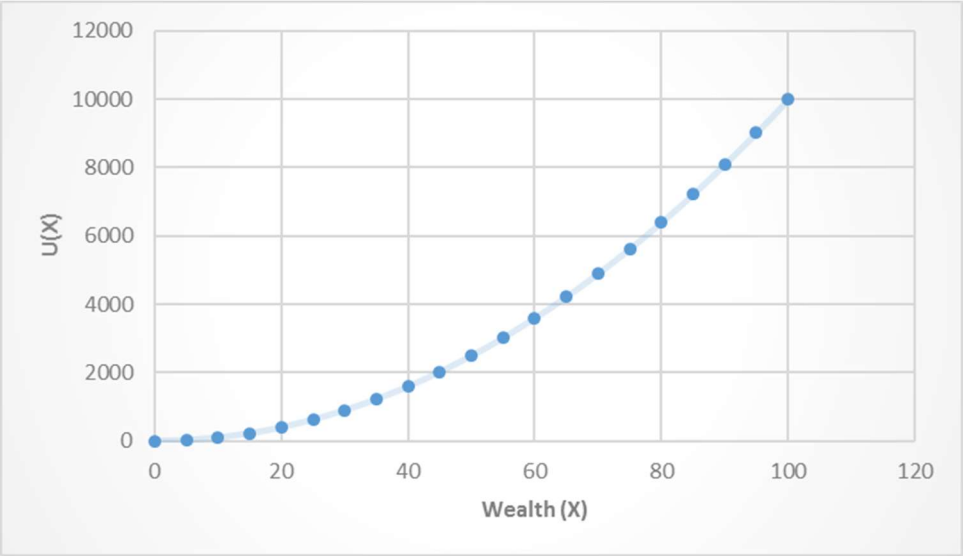
   a. If the investor is more risk averse, r_{CE} will be larger
   b. If the investor is more risk averse, r_{CE} will be smaller
   c. The value of r_{CE} will be indifferent of how risk averse the investor is.
   d. The value of r_{CE} will be equal to zero and indifferent of how risk averse the investor is.

   Answer:

   The correct answer is b.

   A more risk averse investor would be willing to accept a lower risk-free rate of return instead of the risky outcome.

2. Suppose that we have the following utility function. What kind of an investor would you expect based on the form of the utility function?



   a. A risk neutral investor
   b. A risk-loving investor
   c. A risk averse investor
   d. None of the above

   Answer:

The correct answer is b.

In contrast to a risk-averse investor with a concave utility function, a risk-loving or risk-seeking investor would have a utility function that is convex. This is essentially equivalent to an investor receiving a higher level of utility from a risky choice than one obtained from an equal but sure outcome. Hence, the convexity of the utility function.

3. Which of the following statements are correct? (Select all that apply.)

   a. Most individuals have risk aversion levels between 1 and 10.
   b. The concavity of the utility function measures the degree of risk aversion.
   c. The level of risk aversion is different for each individual.
   d. Utility functions typically decrease with wealth.

Answer:

The correct answers are a, b and c.

Answer a: Please refer to the video on measuring risk aversion. Experiments show that most individuals have a risk aversion measure between 1 and 10, with it being very rare to have risk aversion greater than 10.

Answer b: The steeper the utility function, the higher the degree of risk aversion.

Answer c: Every individual's risk aversion level is different.

4. Which of the following statements is true about a risk-neutral investor?

   a. A risk-neutral investor considers only the expected return in judging a risky portfolio.
   b. For a risk-neutral investor, the certainty equivalent is greater than the expected rate of return on a risky prospect.
   c. A risk-neutral investor is characterized by an infinite risk aversion coefficient.
   d. A risk-neutral investor penalizes the expected rate of return from a risky portfolio to account for the risk involved.

Answer:

The correct answer is a.

A risk-neutral investor would judge a risky protect solely by its expected return.

5. The concavity of the utility function implies that going from $1 to $2 is more valuable for investors than going from $100,000 to $100,001. True or False?

Answer:

The correct answer is True.

Concave utility functions imply decreasing marginal utility. That is, the value of an additional dollar going from $1 to $2 is much more valuable than going from $100,000 to $100,001 for an individual with a concave utility function.