FN241 class 1-3 review questions

Provide precise and concise responses to the following questions referring to theories, concepts, and frameworks as discussed in the class materials and the main textbook. For quantitative problems, demonstrate the process of calculation and clearly highlight your answers as appropriate. Write down your answers clearly so that the lecturer can read them easily.

Review questions

1. Explain the difference between pure risk and speculative risk

2. How does diversifiable risk differ from non-diversifiable risk?

3. Identify the approaches that insurers can use to deal with the problem of catastrophic loss exposures.

Application questions

1. Risk managers use a number of methods for managing risk. For each of the following, what method for handling risk is used? Explain your answer.
    a. The decision not to carry earthquake insurance on a firm's main manufacturing plant
    b. The installation of an automatic sprinkler system in a hotel
    c. The decision not to produce a product that might result in a product liability lawsuit
    d. Requiring retailers who sell the firm's product to sign an agreement releasing the firm from liability if the product injures someone

2. Compare the risks of (i) fire with (ii) war in terms of how well they meet the requirements of an ideally insurable risk.

3. The risk manager of an oil company decides to install camera surveillance systems at several of the "problem" service stations at a cost of $85,000 per system. The risk manager expects each surveillance system to generate an after-tax net cash flow of $35,000 per year for 3 years with no terminal values. Assuming an interest rate of 8.5%, what is the NPV of this project? What is the project's IRR? Do NPV and IRR indicate that this project is acceptable?

4. RST Company has production facilities in Salt Lake City and Cleveland. The probability that in any given year a fire will damage the production facility in Salt Lake City is 5 percent. The probability that in any given year a fire will damage the Cleveland production facility is 4 percent.
    a. What is the probability that BOTH production facilities will be damaged by fire in any given year?
    b. What is the probability that AT LEAST ONE of the production facilities will be damaged by fire in any given year?