

Old Exam Questions
Risk & Return

READ FIRST: The following questions are reproduced from my previous exams. Exam formats have differed over time, so you may notice some differences in formatting or question style. The intent is that these questions will help you to practice, but it is **NOT** intended to replace your own study habits.

1. You gathered data on a firm's returns over several years. You observed returns of 4%, 7%, -3%, and 4%. Given this, what would you expect next year's return to be?
 - A. 3%
 - B. 4%
 - C. 5%
 - D. 6%
 - E. A different value

2. You're evaluating your investment in Skycrawler Industries. Over the past 3 years, the stock has earned returns of -2%, 24%, 17%. What is the standard deviation of this investment?
 - A. 1%
 - B. 7%
 - C. 10%
 - D. 14%
 - E. A different value

3. Which of the following is true regarding the probabilities that we used to calculate expected returns and variances?
 - A. Every state is assigned a probability
 - B. The states are mutually exclusive
 - C. The probabilities add up to 1
 - D. The probabilities are non-negative
 - E. All of these are true

4. You are reviewing your holdings and you observe that Commodore Corp. had returns of 10%, 20%, and 6.44% over the last three years, respectively. What annual return did you effectively earn from this investment over that time period? **(HINT: Round any intermediate calculations to 4 decimal places.)**
- A. 10.75%
 - B. 11.67%
 - C. 12%
 - D. 12.15%
 - E. A different value
5. You observed that MNV Broadcasting has generated returns of 20%, 5%, and 20% over the past few years. What is the standard deviation of the stock's returns over that time? **(HINT: Round your answer to 4 decimal places)**
- A. 0.75%
 - B. 7.17%
 - C. 8.66%
 - D. 9.19%
 - E. A different value
6. You are analyzing Richter's Candy Canes. You want to know the standard deviation of the stock. You believe that there two potential states of the world next year: a boom or a bust. You think there is a 30% chance of a boom. In that case, the stock will earn a 20% return. In the event of a bust, the stock will suffer a stagnant 0% return. What is the stock's standard deviation using these projections? **(HINT: Round all intermediate calculations to 4 decimal places)**
- A. 9.17%
 - B. 9.62%
 - C. 10%
 - D. 10.31%
 - E. A different value

7. You are attempting to calculate the expected return for Excel Investments. You have made the following projections:

State	Probability	Return
Boom	0.2	12%
Normal	0.4	8%
Bust	0.4	-6%

What is the expected return on this stock?

- A. 3.2%
- B. 3.6%
- C. 4%
- D. 4.4%
- E. A different value

Use the following information for Questions 12 and 13:

You are considering an investment in Tennessee Fried Chicken, Inc. Your analysis indicates that the stock's performance is extremely dependent on the Fed's action on interest rates. Your current projections are summarized in the following table:

The Fed raises interest rates by...	Probability	Return
0%	25%	-10%
.25%	50%	6%
.5%	25%	14%

8. [Quantitative] What is the expected return on Tennessee Fried Chicken?
- A. 3%
 - B. 4%
 - C. 5%
 - D. 6.67%
 - E. A different value
9. [Quantitative] What is the standard deviation of Tennessee Fried Chicken?
- A. 0.76%
 - B. 7.6%
 - C. 8.15%
 - D. 8.72%
 - E. A different value

Use the following information for questions 14 and 15:

In reviewing your portfolio's performance, you observe that Horizon Wireless has generated returns of 12%, 14%, -2%, and 8% over the past 4 years.

10. [Quantitative] What would you expect the return on Horizon to be next year?

- A. 7.82%
- B. 8%
- C. 9%
- D. 10%
- E. A different value

11. [Quantitative] What is the standard deviation of Horizon Wireless?

- A. 0.51%
- B. 6.16%
- C. 7.12%
- D. 7.71%
- E. A different value

Use the following information for questions 16-18:

You are considering two stocks for your portfolio. Pillows 'R' Us has generated returns of 0%, 6%, and 12% over the past three years, respectively. At the same time, Quilt Outfitters has had returns of 8%, -4%, and 2%.

12. [Quantitative] What would you expect the return on Pillows 'R' Us to be next year?
- A. 3%
 - B. 4%
 - C. 5%
 - D. 6%
 - E. A different value
13. [Quantitative] What was the covariance of these securities over these three years?
- A. -36
 - B. -18
 - C. 0
 - D. 18
 - E. A different value
14. [Quantitative] What annual return would Quilt Outfitters have earned you over this time?
- A. 1.88%
 - B. 2.75%
 - C. 4.12%
 - D. 5.75%
 - E. A different value
15. [Quantitative] You are analyzing Loca Cola's stock. You know that the stock's last three annual returns were 10%, 25%, and -5%. What would you estimate as the standard deviation of Loca Cola's stock?
- A. 2.25%
 - B. 15%
 - C. 20%
 - D. 22.5%
 - E. A different value

16. [Quantitative] You are trying to predict the return on Sawyer Consulting. You know that the firm's returns over the last 4 years have been 4%, 8%, 2%, and 10%. Given this data, what would you expect next year's return to be?
- A. 5.95%
 - B. 6%
 - C. 6.2%
 - D. 8%
 - E. A different value

17. [Quantitative] You are projecting the return on Switch Hardware Company next year. You believe that the firm's return is dependent on how the economy is doing. Your predictions are presented in the following table:

State	Probability	Return
Boom	20%	15%
Strong	25%	12%
Sluggish	25%	2%
Bust	30%	-6%

Given this information, what is the firm's expected return?

- A. 4.7%
 - B. 5%
 - C. 5.33%
 - D. 5.75%
 - E. A different value
18. [Conceptual] You contribute \$1,000 per month to your retirement account. In order to account for the effect of these contributions, you should most appropriately use the _____ average.
- A. Arithmetic
 - B. Dollar-weighted
 - C. Geometric
 - D. Any of these will work

19. [Conceptual] A risk averse investor is given a choice between two investments. Bundy Consulting has an expected return of 5% and a standard deviation of 0%, while Jefferson Investments has an expected return of 10% and a standard deviation of 20%. Which will the investor prefer?
- A. Bundy Consulting
 - B. Jefferson Investments
 - C. Need more information
20. [Conceptual] Which of the following is **NOT** necessary for calculating the determining the holding period return of a stock?
- A. Dividends
 - B. Number of shares
 - C. Purchase price
 - D. Sale price
 - E. All of these are relevant
21. [Quantitative] You are evaluating the performance of your investments. You see that Cube Décor earned returns of 10%, 15%, 5%, and 10% over the last 4 years, respectively. What annual return did you earn on this investment?
- A. 9.78%
 - B. 9.86%
 - C. 9.94%
 - D. 10%
 - E. A different value

22. [Quantitative] You are attempting to model the returns on Home Searchers Television. You believe that the firm's returns are linked to what the Fed does with interest rates. Your beliefs are presented in the following table:

Rates...	Probability	Return
Increase	30%	-10%
Stay Constant	60%	5%
Decrease	10%	20%

Given this, what is the firm's standard deviation?

- A. 9%
 - B. 9.05%
 - C. 9.1%
 - D. 9.15%
 - E. A different value
23. [Conceptual] Which of the following is **NOT** a characteristic of probabilities?
- A. All potential outcomes must have a probability
 - B. No probability can be greater than 1
 - C. No probability can be less than 0
 - D. The sum of the probabilities is equal to 1
 - E. All of these are characteristics of probabilities
24. [Conceptual] Suppose you gathered data on a stock's returns over the course of 10 years. Returns were quite volatile, but you calculated that the arithmetic mean is 12%. Given that information, which of the following would make the most sense as the geometric mean?
- A. 11.75%
 - B. 12%
 - C. 12.25%
 - D. None of these make sense

25. [Quantitative] You have observed Spieth Performance over the last 4 years. Its returns were 16%, 8%, 4%, and 12%. What is the standard deviation of the firm over that time?

- A. 4.75%
- B. 4.87%
- C. 4.99%
- D. 5.16%
- E. A different value

26. [Quantitative] You have tracked Maria Threat Analysis over the last 4 years. You see that the company earned returns of 8%, -12%, 2%, and 18%. What would you predict its return will be next year?

- A. 3%
- B. 4%
- C. 5%
- D. 6%
- E. A different value