

Basic Investment Management Statistics

QUIZ

Use the following data for the next 2 questions.

Year	% per annum
2015	-7
2016	12
2017	15
2018	3
2019	10

1. Given the returns above, what is the mean return per annum ? .
 - A. 8.75%
 - B. 8.2%
 - C. 6.6%
 - D. 8.45%

2. Given the returns above, what is the population variance of the returns
 - A. 0.006194
 - B. 0.006184
 - C. 0.006284
 - D. 0.006384

3. A client starts the year with a \$5,000,000 portfolio. If 80% of the portfolio is invested in equities with a return of -8% , and 20% of the portfolio is invested in bonds with a 6% yield, what is the portfolio's total expected return for one year?
 - A. -7.6%
 - B. -5.2%
 - C. -2.0%
 - D. 3.1%

Use the following data for the next 2 questions.

Consider the following data. Assume that contributions are made at the **beginning of the year**.

Year	Year-End Value	Contributions
2017	\$300	-
2018	\$300	\$20
2019	\$310	\$30

4. What is the time-weighted rate of return on the fund?

- A. -6.156%
- B. -6.151%
- C. 6.151%
- D. 6.156%

5. What is the dollar weighted rate of return on the fund?

- A. -6.156%
- B. -6.151%
- C. 6.151%
- D. 6.156%

6.

Time Period	Observed Returns	
	ANZ	Market (M)
1	0.20	0.05
2	-0.10	-0.04
3	0.12	0.05
4	0.05	0.10

- a. Compute the mean returns for ANZ and M.
- b. Compute the sample standard deviations for the returns of ANZ and M.
- c. Compute the covariance between returns for ANZ and M.
- d. Compute the correlation coefficient between the returns of ANZ and M.