# Risk Vs. Return

1. You expect that an investment could gain or lose as much as 20% in a year. Your investment is $5,000. What is the lowest value you expect at the end of the year?

   1) $1,000
   2) $2,000
   3) $4,000
   4) $5,000

Original investment_____ x _____ (Percentage loss) = _____Loss

Original investment_____ - _____ Loss = _____ is the lowest value you expect at the end of the year

2. You lost 26% on a bad investment. You sell the investment and reinvest in a different stock. What investment return do you need in order to get back to your original amount?

   1) 10%
   2) 26%
   3) 30%
   4) 35%

Suppose you start with a $100 investment. You then lose 26%, which in this case is $26, and wind up with $74 ($100 - $26 = $74).
original investment _____ = 74 x (1 + r)

3. You graph some investment options on a cartesian graph with risk on the y axis and return on the x axis. If you draw a best-fit line, you would expect it to:

   1) Be horizontal
   2) Be vertical
   3) Be downward sloping (negative slope)
   4) Be upward sloping (positive slope)

4. The variance of a series of numbers is the sum of the squares of their differences from the mean (average) of the numbers divided by the number of items in the series. Variance is a common measure of risk. What is the variance of these investment returns? 10, 30, 20

   1) 0
   2) 66.7
   3) 100
   4) 200

Mean = _____ + _____ + _____ = _____ / 3 = _____
So you square 10 (because 10 is 10 away from the mean, which is 20) and you square 10 again (because 30 is 10 away from the mean, 20)
You end up with a total of 200 (100 + 100 = 200)

You then divide 200 by 3 because that is the number of items in the series (10, 20, 30)
Variance = _____ / 3 = _____

5. Assume risk and return are positively related. Which algebraic formula best represents this relationship?

     1) Risk = m x Return where m is negative
     2) Risk = m x Return where m is zero
     3) Risk = m x Return where m is positive