Instructions:
Be verbose. Explain clearly your reasoning in your written answers.

Written answers are worth 10 points per question. 4 questions total – 40 possible points.

1. Answers should be formatted as a PDF.
2. Restate the question along with the question number before each answer
3. When finished, email your PDF directly to me.

All work needs to be in my inbox by 8pm on 12/17.

You may use your notes and the internet. You may not work with other students – all work must be your own. You may not copy an answer directly from an internet source. Any reference to a source outside the notes must be attributed.

All students will be held to the Duke Community Standard

Duke's Community Standard:

Duke University is a community dedicated to scholarship, leadership, and service and to the principles of honesty, fairness, respect, and accountability. Citizens of this community commit to reflect upon and uphold these principles in all academic and non-academic endeavors, and to protect and promote a culture of integrity.
To uphold the Duke Community Standard:
1. I will not lie, cheat, or steal in my academic endeavors,
2. I will conduct myself honorably in all my endeavors; and
3. I will act if the Standard is compromised.

1. Why do we need risk management?

2. Discuss the difference between Market, Credit, and Liquidity risks?

3. Compare and contrast Standard Deviation, Value at Risk, and Expected Shortfall as competing risk measures. Discuss different assumptions such as underlying distributions as well as applications affect where one might be preferred over another.

4. Discuss CAPM and how it describes the risk of an individual stock. How does that relate to portfolio optimization? What are the limitations?