Scale:
✓=points
82=75
79=73
78=72
74=68
72=66
70=65
54=55
52=53
44=49
42=47
40=45
38=43

Quiz B: 7/25/16 Name Key

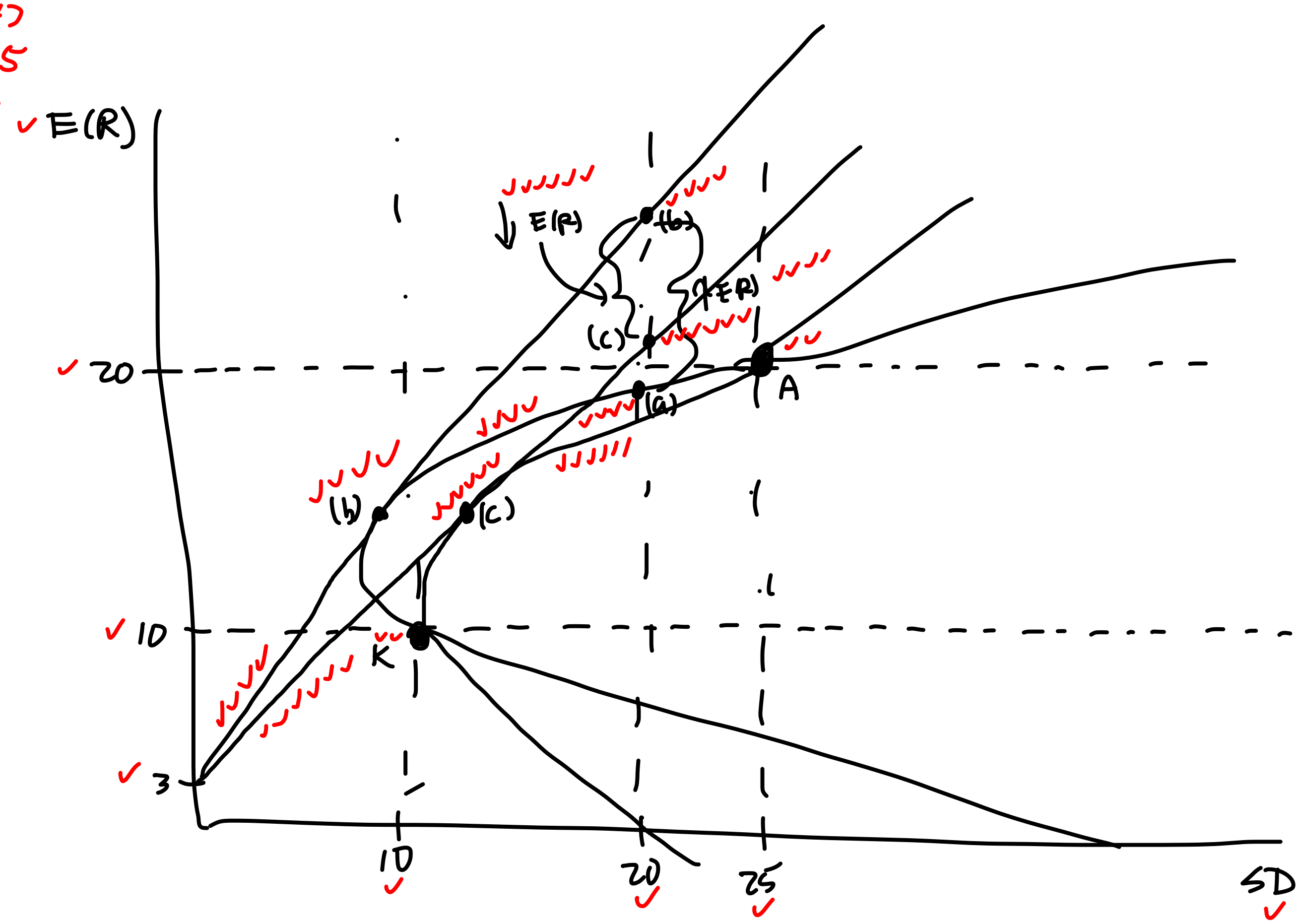
Assume Kellogg has a standard deviation of returns of 10% and an expected return of 10%. Assume also that Amazon has a standard deviation of returns of 25% and an expected return of 20%. And assume that the correlation between the returns on Kellogg and Amazon equals +0.3.
Note: Answer all of the following questions with a single graph. Just be sure to identify which part of the graph answers which question.

a. If you can take long or short positions in Kellogg and Amazon, identify a portfolio that allows you to have a standard deviation of returns of 20%. Identify the highest expected return portfolio you can build that allows you to earn your desired standard deviation.

b. Assume you can also take long or short positions in Treasuries that earn a 3% return. How does the expected return of your best portfolio (that allows you to have a standard deviation of returns of 20%) compare to part a? Are you better off or worse off?

c. Assume the correlation between Kellogg and Amazon rises. How does the expected return of your best portfolio (that allows you to have a standard deviation of returns of 20%) compare to part b? Are you better off or worse off?

d. Have ~~you invested more in~~ 100k. what position in Treasuries ~~of~~ + the portfolio of Kellogg and Amazon in parts b and c?



b. better off

c. worse off

d. Short sell 100,000 of Treasuries + invest 200,000 in portfolio of Amazon + Kellogg in part b. Short sell more than 100,000 of Treasuries in part c + invest more than 200,000 in portfolio in part c.