

Scale:

✓ = points

Quiz A: 7/25/16

Name Key

82=75

79=73

78=72

74=68

72=66

70=65

54=55

52=53

44=49

42=47

40=45

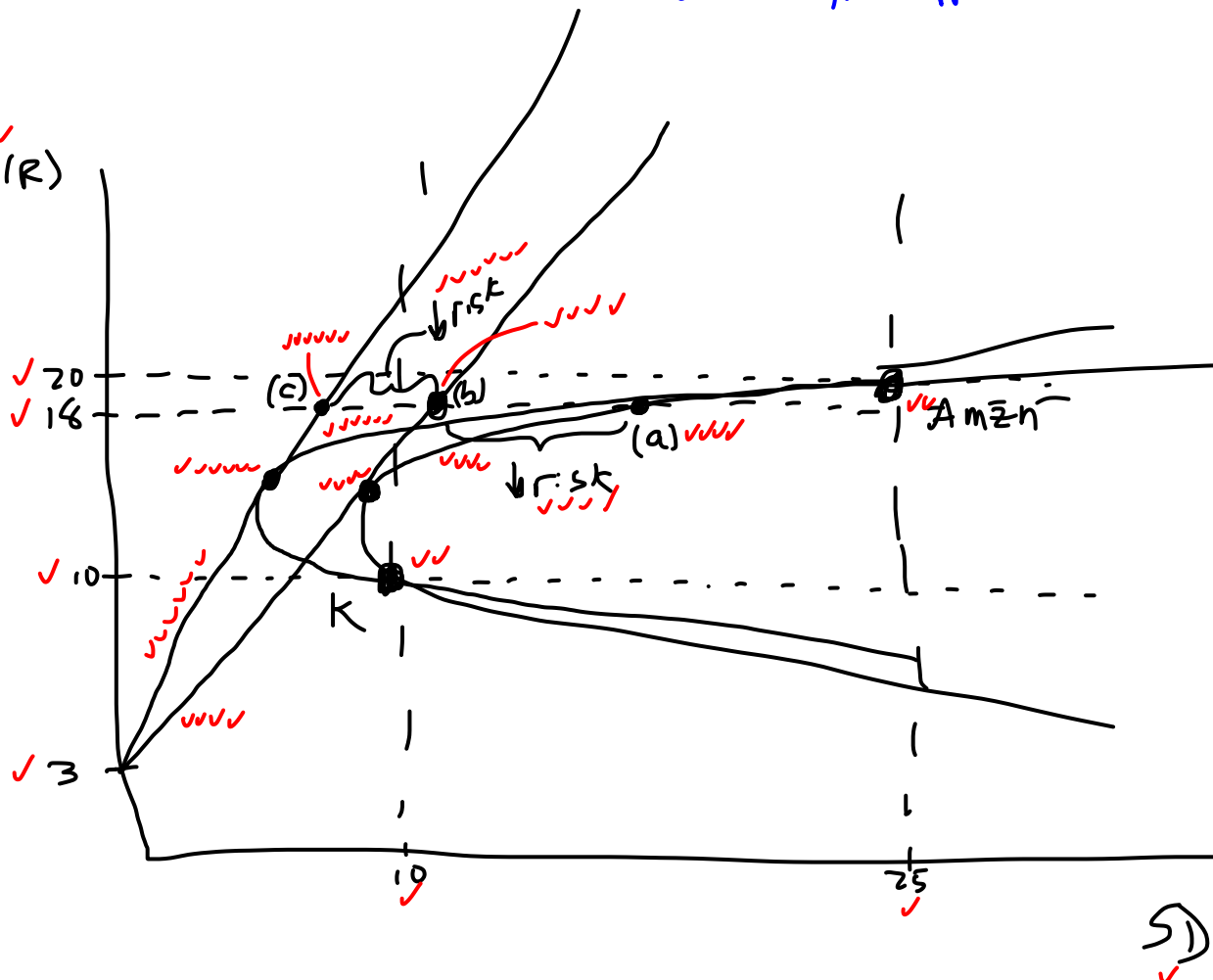
38=43

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.

- If you can take long or short positions in Kellogg and Amazon, identify a portfolio that allows you to earn an expected return of 18%. Identify the lowest risk portfolio you can build that allows you to earn your desired expected return.
- Assume you can also take long or short positions in Treasuries that earn a 3% return. How does the risk of your best portfolio (that allows you to earn 18%) compare to part a? Are you better off or worse off?
- Assume the correlation between Kellogg and Amazon falls. How does the risk of your best portfolio (that allows you to earn 18%) compare to part b? Are you better off or worse off?
- Have you invested more in Treasuries or the portfolio of Kellogg and Amazon in parts b and c?

Assume you have \$100,000 of wealth. What are your approximate holdings of



b. better off

c. better off

d. Short sold 20,000 of Treasuries, purchased 120,000 of portfolio of Kellogg + Amazon