Extra Credit Problem: due May 13, 1996

Extra Credit (3 points) – This is an individual assignment

Graph the portfolio opportunity set when there are only two risky assets:

\[ E(R_a) = .01, \ E(R_b) = .03, \ \sigma(R_a) = .10, \ \sigma(R_b) = .10 \text{ and } \text{cov}(R_a, R_b) = -.0005. \]

(a) Label the efficient set.

(b) What is the maximum amount that a risk averse expected utility maximizing investor would invest in asset b?

(c) What is the most that this same individual would invest in asset a?

(d) Could this situation exist in equilibrium (where all investors see the same opportunity set)? If not, what would you expect to happen?

(e) Suppose \( \text{cov}(R_a, R_b) = .01 \). How would you answer questions (a) - (d)?