Questions for Beta Management

1. Calculate the variability (standard deviation) of the stock returns of California REIT and Brown Group during the past 2 years. How variable are they compared with the Vanguard Index 500 Trust? Which stock appears to be the riskiest?
2. Suppose the Beta’s position had been 99% of equity funds invested in the index fund and 1% in the individual stock. Calculate the variability of this portfolio using each stock. How does each stock affect the variability of the equity investment, and which stock is riskiest? Explain how this makes sense in view of your answer to Question #1 above.
3. Perform a regression of each stock’s monthly returns on the Index returns to compute the “beta” for each stock. How does this relate to the situation described in Question #2 above?
4. How might the expected return for each stock relate to its riskiness?