Note: There are no points for solving this problem. All points are for setting up the equations, plugging in the relevant numbers, and stating what you want to solve for (if you are not simply solving the equation).

Given the following information calculate the beta of a portfolio with $\$ 125,000$ invested in Apple (AAPL) which has a beta of 0.75 and $\$ 75,000$ invested in GlaxoSmithKline (GSK). Assume the risk-free rate is $2 \%$ and that the market risk-premium equals $5 \%$.

|  | Return on: |  |  |
| :---: | :---: | :---: | ---: |
| Year | S\&P500 | AAPL | GSK |
| 2012 | $17 \%$ | $1 \%$ | $8 \%$ |
| 2011 | $4 \%$ | $35 \%$ | $29 \%$ |
| 2010 | $22 \%$ | $77 \%$ | $-2 \%$ |
| 2009 | $33 \%$ | $113 \%$ | $16 \%$ |

Wall Street Journal Questions are on the back of this page.

