**Problem: Performance Metrics**

When you pick the best choice for your portfolio, defend your decision in a 100 - 200 word **essay.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Papa Fund | Mama Fund | Market | Risk-Free |
| 2008 | -12.6% | -22.6 | -24.5% | 1% |
| 2009 | 25.4 | 18.5 | 19.5 | 3 |
| 2010 | 8.5 | 9.2 | 9.4 | 2 |
| 2011 | 15.5 | 8.5 | 7.6 | 4 |
| 2012 | 2.6 | -1.2 | -2.2 | 2 |

You have been given the following return information for two mutual funds (Papa and Mama), the market index, and the risk-free rate.

Calculate the Sharpe ratio, Treynor ratio, Jensen’s alpha, information ratio, and R-squared for both funds and determine which is the best choice for your portfolio.