

UNIVERSITY OF TEXAS AT AUSTIN

Problem set 3

Continuous-dividend-paying stocks.

Problem 3.1. You have \$300 to invest in a market index worth \$100 per unit. The market index pays dividends continuously with the dividend yield equal to 0.02. How many units of the market index will you own in six months?

Problem 3.2. Consider a certain stock which pays dividends continuously with the dividend yield of 0.03. How many shares would you need to purchase today to ensure that you own **exactly** one share in a quarter year? Moreover, let today's price of this stock be \$80 per share. How much does your investment cost you?