

## Math 181

## HW 6

1. The volatility of a stock price is 30% per year. What is the standard deviation of the percentage price change in one trading day? Assume that there are 250 trading days per year.

2. Find the value of a 1 year European call option on a (non-dividend paying) stock with a strike price of \$50, when the current stock price is \$40, the risk-free rate of return is 5% per year and the volatility is 20% per year.