FIN 5350- Homework 2

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## Numerical Problems

Please complete the following numerical problems by hand (or in a Rmd document like this one).

##### **Problem 1**

Let , , , , and . Let , , and .

##### **Problem 2**

Let , , , , and . Let , , and .

##### **Problem 3**

Let , , , , , and . Let , , and . Construct the binomial tree for a call option. At each node provide the premium, , and .

##### **Problem 4**

Repeat the option price calculation in the previous question for stock prices of , , , , and , but now let . Keep everyting else fixed. What happens to the initial option as the stock price increases?

##### **Problem 5**

Let , , (continuously compounded), , , and year and .

##### **Problem 6**

Let , , (continuously compounded), , , year, and .