



Corporate Investment Appraisal

Masters in Finance

2016-2017

Fall Semester

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Problem Set 3: Valuation of Financial Options-SOLUTIONS

1.

(a)

u	1,349858808
d	0,740818221
p	0,442059121

(b)

Call	
K	4
T	1

Stock Tree	Year	0	1
		3,25	4,387041125
			2,407659217

Call Tree	Year	0	1
		0,169392635	0,387041125
			0

(c)

K	4.25
T	2

Stock Tree	Year	0	1	2
		3,25	4,387041125	5,921886101
			2,407659217	3,25
				1,783637817

Put Tree	Year	0	1	2
		1,236088736	0,552389275	0
			1,800052576	1
				2,466362183

2.

(a)

Call	
T	1 year
K	4.5

Using Black-Scholes

d1	-0,438915178
d2	-0,638915178

N(d1)	0,330361499
N(d2)	0,261439057

Call	0,156676371
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(b)

Put	
T	0,75
K	4,5

d1	-0,550116863
d2	-0,723321944

N(d1)	0,291119611
N(d2)	0,234741057

Call	0,12
Put	0,58

3.

Stock	
Sigma	0,3
S	3,25

Rf	1%
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Number of intervals	N	6	
Time to maturity	T	1	Dt 0,166666667 TimeStep
StrikePrice	4		
u	1,130290283		
d	0,884728477		
p	0,476212411		

