

HOMWORK #5

PLEASE WRITE YOUR FULL NAME AND THEN SUBMIT YOUR HOMEWORK

Name:

ANSWERS

Problem 13.7

Calculate the Call and Put Premiums using the information below

Standard Deviation (σ) =	0.30
Expiration (in years) (T) =	1.00
Risk-Free Rate (Annual) (i) =	1.00%
Stock Price (S) =	95.00
Exercise Price (X) =	115.00
Dividend Yield (annual) (δ) =	0.00

d1 =	-0.454
d2 =	-0.754
N(d1) =	0.325
N(d2) =	0.226

Call =	5.2010
Put =	24.0567

$\ln(S/X)$	$(i-\delta+\sigma^2/2).t$	$\sigma\sqrt{t}$
-0.19105524	0.055	0.3
e^{-it}	$e^{-\delta t}$	
0.990049834	1	

Problem 13.8

Use **Put-Call Parity method** to calculate the Put Option premium

Call Premium =	\$	13.00
Stock Price (S) =	\$	65.00
Exercise Price (x) =	\$	60.00
Risk Free Rate (i) =		2.00%
Time (t) =		1 year

e^{-it}	0.980198673
Put Premium=	\$ 6.81

$$P = (X \cdot e^{-it}) - S + C$$