

Download File PDF Soa Exam C Solutions

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

SOA Sample Exam Solutions

Solution 1

A Chapter 1, Put-Call Parity

We can use put-call parity to solve this problem:

$$C_{put}(K,T) + Ke^{-rT} = P_{call}(K,T) + S_0 - P_{call}(K,T)$$

$$[C_{put}(K,T) - P_{call}(K,T)] - S_0 = -Ke^{-rT}$$

$$-0.15 - 48 = -35e^{-0.05}$$

$$\ln\left(\frac{0.85}{35}\right) = -0.05$$

$$r = 0.0318$$

Solution 2

D Chapter 2, Arbitrage

Let X be the number of calls with a strike price of 45 that are purchased for Mary's portfolio. If we assume that the net cost of establishing the portfolio is zero, then we can solve for X :

$$11 - 2 + 8 + 11 + 3X = 0$$

$$X = 2$$

The table below shows that regardless of the stock price at time T , Mary's profit is positive. Therefore, Mary is correct. This implies that John is incorrect.

Mary's Portfolio		Time T			
Transaction	Time 0	$S_T < 40$	$40 \leq S_T \leq 50$	$50 \leq S_T \leq 55$	$S_T > 55$
Buy 1 of C(45)	-11.00	0.00	$S_T - 45$	$S_T - 45$	$S_T - 45$
Sell 1 of C(50)	10.00	0.00	0.00	$-3S_T + 30$	$-3S_T + 30$
Buy 2 of C(55)	-20.00	0.00	0.00	0.00	$2S_T - 50$
Loan #1	-1.00	e^{rT}	e^{rT}	e^{rT}	e^{rT}
Total	0.00	e^{rT}	$e^{rT} + 3S_T - 45$	$e^{rT} + 11S_T - 25S_T$	e^{rT}

© 2010 Actex

[Download PDF version of :](#)
Soa Exam C Solutions