

Options Strategies

QUICKGUIDE





Mastering Options Strategies

A step-by-step guide to understanding profit & loss diagrams



Because Money Doesn't Grow on Trees

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In order to simplify the computations, commissions have NOT been included in the examples used in these materials. Commission costs will impact the outcome of all stock and options transactions and must be considered prior to entering into any transactions.

Options involve risk and are not suitable for all investors. Prior to buying or selling an option, a person must receive a copy of *Characteristics and Risks of Standardized Options*, available to download at www.cboe.com. Copies of this document are also available from your broker or The Options Clearing Corporation (OCC), One North Wacker Drive, Suite 500, Chicago, IL 60606 or by calling 1-888-OPTIONS. The OCC Prospectus contains information on options issued by The Options Clearing Corporation. Copies of this document are also available from the OCC at the above address. The documents available discuss exchange-traded options issued by The Options Clearing Corporation and are intended for educational purposes. No statement in the documents should be construed as a recommendation to buy or sell a security or to provide investment advice.

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PAST PERFORMANCE IS NOT A GUARANTEE OF FUTURE PERFORMANCE.

Why You Need This Workbook

Learning the basics of options involves three steps:

- 1. Understand the rights and obligations of long and short options,
- 2. Learn to calculate profit and loss at expiration, and
- 3. Master the mechanics of exercise and assignment.

This workbook takes you through each step. First, by drawing diagrams, you will learn how to calculate profit and loss on an option's expiration date. This will also teach you recognize the potential profit, potential risk and break-even point of different positions. This knowledge will serve you well when choosing strategies. Second, the problems that ask you to recognize when option exercise and assignment occurs will reinforce how options can interact with a position in the underlying stock.

After mastering the concepts taught in this workbook, your options education will **not** be complete! You will still need to learn the tradeoffs that different strategies offer and about option price behavior. Finally, to use options successfully for either investing or trading, you must learn a two-step thinking process. After identifying a goal, the first step is initiating an option position, and the second step is closing the position on or before the expiration date. These concepts along with many strategies are taught in classes at The CBOE's Options Institute.

To learn more about The Options Institute classes, schedules and/or to register, call 1-877-THE-CBOE or visit www.cboe.com

How to Draw Profit and Loss Diagrams

Step 1: Describe the opening transaction completely

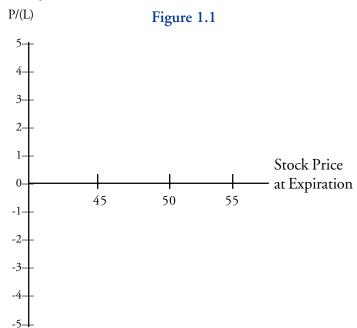
Strategy: Long Call EXAMPLE: Buy a 50 Call @ \$2

Step 2: Make a profit/loss table and a grid for the diagram.

The table (Table 1.1) should have one column for each option and one column for the total profit/loss. On the grid (Figure 1.1), the vertical line represents profit and loss, labeled P/(L), and the horizontal line represents a range of stock prices.

Strategy: Long Call EXAMPLE: Buy a 50 Call @ \$2

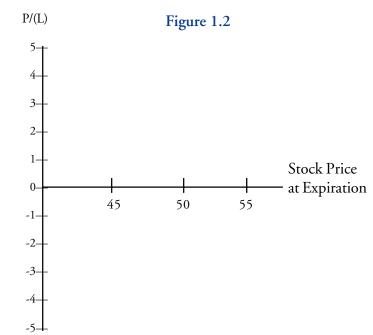
Table 1.1	
Stock Price at Expiration	Long 50 Call @ 2 P/(L)
57	
56	
55	
54	
53	
52	
51	
50	
49	
48	
47	



Step 3: Select a stock price at expiration and calculate the option's value.

With a stock price of \$55 at expiration, for example, the 50 Call has a value of \$5.

Table 1.2	
Stock Price at Expiration	Long 50 Call @ 2 P/(L)
57 56	
55	3
53 52	
51	
50 49	
48 47	
4/	

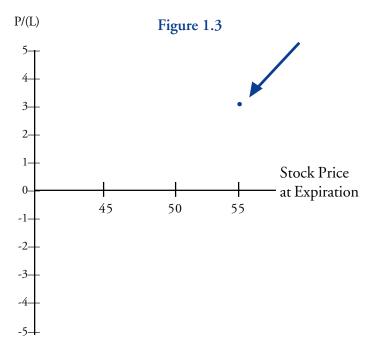


How to Draw Profit and Loss Diagrams

Step 4: Calculate the profit or loss.

For a purchased (long) option, subtract the purchase price from the value at expiration. For a sold (short) option, subtract the value at expiration from the selling price. In this example, 5 (value at expiration) minus 2 (purchase price) equals a profit of 3. Plot the profit on the graph in Figure 1.3.

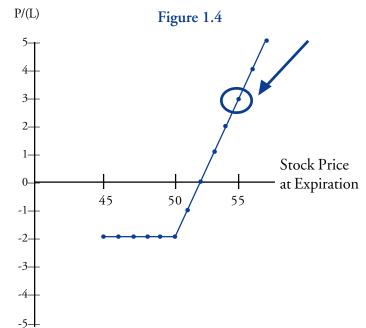
Table 1.3	
Stock Price at Expiration	Long 50 Call @ 2 P/(L)
57 56 55 54 53 52 51 50 49 48 47	3



Step 5: Plot the profit or loss

A stock price of \$55 at expiration, in this example, yields a profit of 3 and creates the point (55, 3) on the grid.

Table 1.4	
Stock Price at Expiration	Long 50 Call @ 2 P/(L)
57	5
56 55	3
54 53	2
52	0
51 50	(1) (2)
49	(2)
48 47	(2) (2)



Step 6: Repeat steps 3, 4 and 5

Repeating the steps above over a range of stock prices creates a set of points which, when connected, becomes the profit and loss diagram.

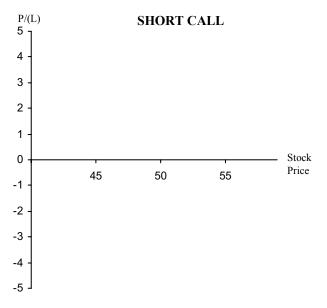
Call Strategies

STRATEGY: Long Call Buy \$50 Call @ 3 EXAMPLE: Stock Price Long Call at Expiration <u>P/(L)</u> 58 57 56 55 54 53 52 51 50

> 49 48

P/(L)	LONG CALL		
5 -				
4 -				
3 -				
2 -				
1 -				
0 -	,		ı	Stock Price
-1 -	45	50	55	11100
-2 -				
-3 -				
-4 -				
-5 -				

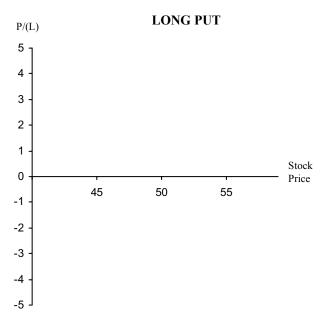
STRATEGY: Short Call Sell \$50 Call @ 3 EXAMPLE: Short Call Stock Price at Expiration P/(L)58 57 56 55 54 53 52 51 50 49 48



Put Strategies

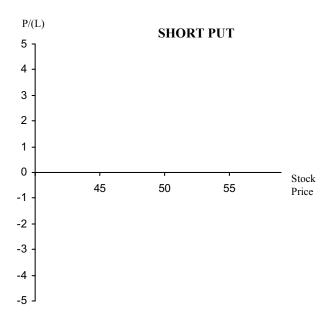
STRATEGY: Long Put

EXAMPLE:	Buy \$50 Put @ 2
Stock Price	Long Put
at Expiration	<u>P/(L)</u>
53	
52	
51	
50	
49	
48	
47	



STRATEGY: Short Put
EXAMPLE: Sell \$50 Put @ 2

0
Short Put
<u>P/(L)</u>



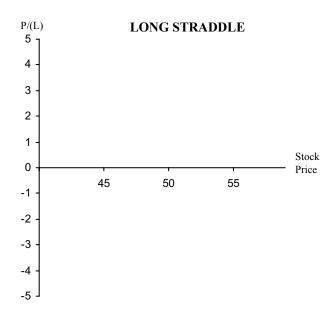
Straddles

STRATEGY: Long Straddle

EXAMPLE: Buy \$50 Call @ 3 and

Buy \$50 Put @ 2

Stock Price at Expiration	Long Call P/(L)	Long Put $P/(L)$	Total <u>P/(L)</u>
59			
57			
55			
53			
51			
50			
49			
47			
44			
43			
41			

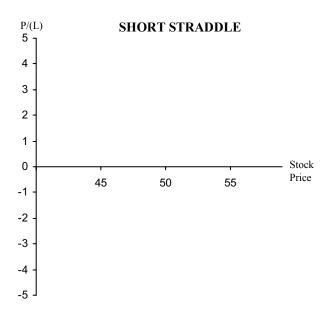


STRATEGY: Short Straddle

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EXAMPLE: Sell \$50 Call @ 3 and Sell \$50 Put @ 2

Stock Price at Expiration	Short Call P/(L)	Short Put P/(L)	Total P/(L)
59			
57			
55			
53			
51			
50			
49			
47			
45			
43			



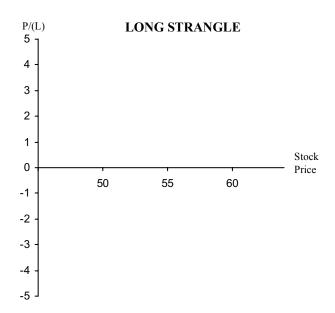
Strangles

Long Strangle STRATEGY:

Buy \$55 Call @ 1 1/2 and EXAMPLE:

Buy \$50 Put @ 1 1/2

Stock Price at Expiration	Long Call <u>P/(L)</u>	Long Put $\underline{P/(L)}$	Total <u>P/(L)</u>
61			
59			
57			
55			
53			
51			
50			
49			
47			
45			
43			

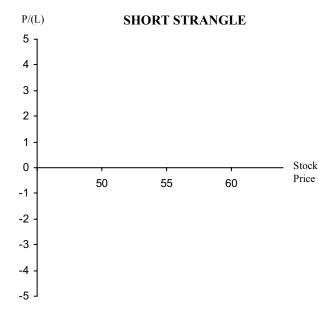


STRATEGY: Short Strangle

Sell \$55 Call @ 1 1/2 and EXAMPLE: Sell \$50 Put @ 1 1/2

> Short Call Short Put Total (L)

Stock Price at Expiration	Short Call P/(L)	Short Put $\underline{P/(L)}$	Tot <u>P/(</u>
61			
59			
57			
55			
53			
51			
50			
49			
47			
45			
43			

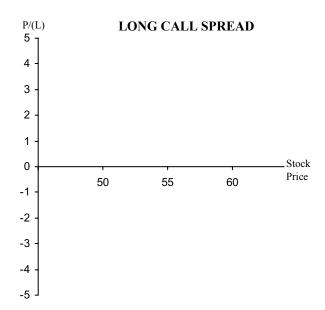


Call Spreads

STRATEGY: Long Call Spread

EXAMPLE: Buy \$50 Call @ 4 and Sell \$55 Call @ 2

Stock Price at Expiration 58	Long Call P/(L)	Short Call P/(L)	Total P/(L)
57			
56			
55			
54			
53			
52			
51			
50			
49			
48			

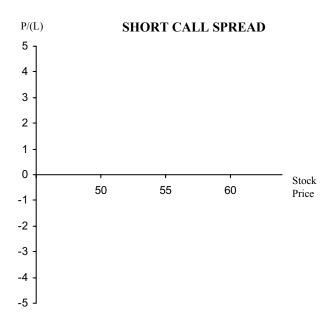


STRATEGY: Short Call Spread EXAMPLE: Sell \$50 Call @ 4 a

48

AMPLE: Sell \$50 Call @ 4 and Buy \$55 Call @ 2

Stock Price Short Call Long Call Total at Expiration <u>P/(L)</u> <u>P/(L)</u> <u>P/(L)</u> 58 57 56 55 54 53 52 51 50 49



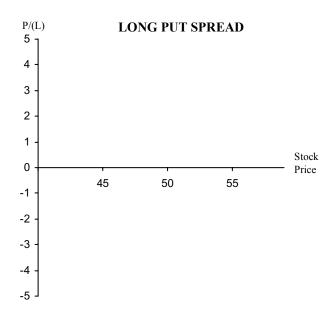
Put Spreads

STRATEGY: Long Put Spread

EXAMPLE: Buy \$50 Put @ 3 1/2 and

Sell \$45 Put @ 1 1/2

Stock Price at Expiration	Long Put $P/(L)$	Short Put P/(L)	Total <u>P/(L)</u>
53			
52			
51			
50			
49			
48			
47			
46			
45			
44			
43			

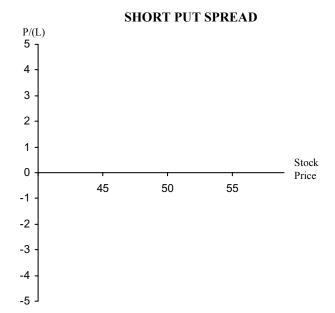


STRATEGY: Short Put Spread

EXAMPLE: Sell \$50 Put @ 3 1/2 and

Buy \$45 Put @ 1 1/2

Stock Price at Expiration	Short Put P/(L)	Long Put <u>P/(L)</u>	Total <u>P/(L)</u>
53			
52			
51			
50			
49			
48			
47			
46			
45			
44			
43			



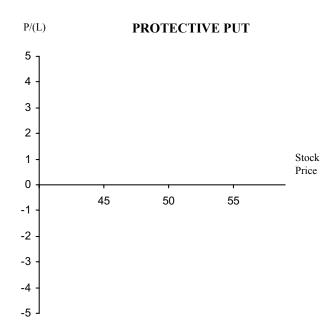
Stock and Option Strategies

STRATEGY: Protective Put

EXAMPLE: Buy Stock @ 50 and

Buy \$50 Put @ 2

Long Stock P/(L)	Long Put $\underline{P/(L)}$	Total P/(L)

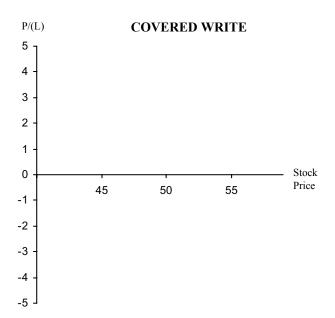


STRATEGY: Covered Write

EXAMPLE: Buy Stock @ 50 and

Sell \$50 Call @ 3

		_	
Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Total P/(L)
53			
52			
51			
50			
49			
48			
47			
46			
45			
44			
43			



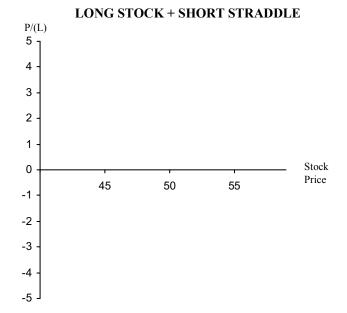
Stock and Option Strategies

STRATEGY: Long Stock + Short Straddle

EXAMPLE: Buy Stock @ 50 and Sell \$50 Call @ 3 and

Sell \$50 Put (a) 2

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Short Put P/(L)	Total <u>P/(L)</u>
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				



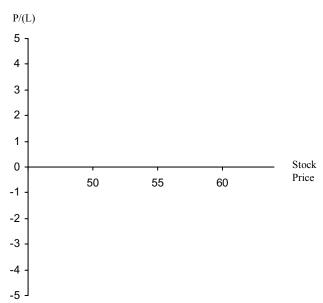
STRATEGY: Long Stock + Short Strangle

EXAMPLE: Buy Stock @ 52 and

Sell <u>1</u> \$55 Call @ 1 <u>and</u> Sell <u>1</u> \$50 Put @ 1

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Short Put P/(L)	Total <u>P/(L)</u>
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				

LONG STOCK + SHORT STRANGLE



Stock and Option Strategies

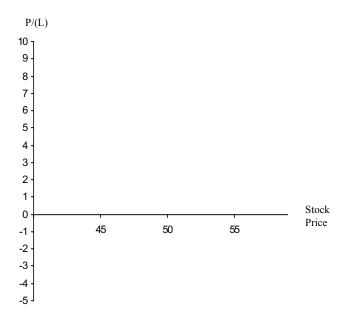
STRATEGY: Long Stock + Ratio Call Spread

EXAMPLE: Buy Stock @ 50 and Buy 1 \$50 Call @ 3 and

Sell <u>2</u> \$55 Calls @ 1 1/2 each

Stock Price				
at Expiration	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				

LONG STOCK + RATIO CALL SPREAD



STRATEGY: Long Stock + Collar

46

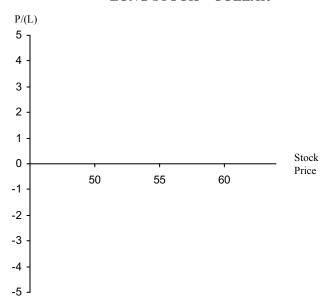
EXAMPLE: Buy Stock @ 52 and

Sell <u>1</u> \$55 Call @ 1 and

Buy <u>1</u> \$50 Put @ 1

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Long Put P/(L)	Total <u>P/(L)</u>
58				
57				
56				
55				
54				
53				
52				
51				
50				
49				
48				

LONG STOCK + COLLAR

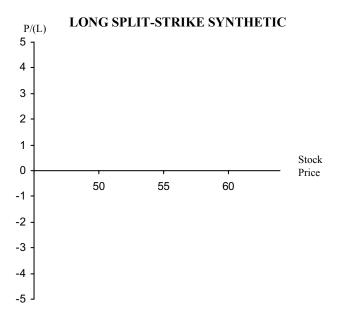


Synthetic Combinations

STRATEGY: Long Split-Strike Synthetic

EXAMPLE: Buy 1 \$55 Call @ 1 1/2 and Sell 1 \$50 Put @ 1

Stock Price at Expiration	Long Call P/(L)	Short Put P/(L)	Total P/(L)
59			
58			
57			
56			
55			
53			
51			
50			
49			
48			
47			



STRATEGY: Short Split-Strike Synthetic

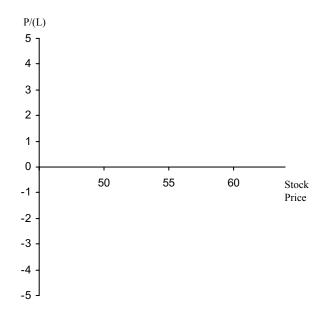
EXAMPLE: Sell <u>1</u> \$55 Call @ 1 1/2 <u>and</u> Buy <u>1</u> \$50 Put @ 1

Stock Price at Expiration	Short Call P/(L)	Long Put $\underline{P/(L)}$	Total <u>P/(L)</u>
59			
58			
57			
56			
55			
53			
51			
50			
49			

48

47

SHORT SPLIT-STRIKE SYNTHETIC



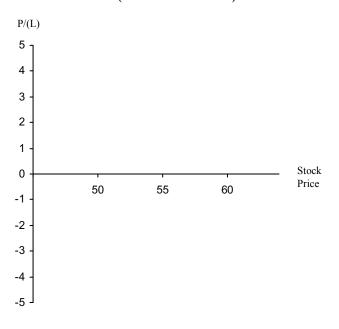
Ratio Spreads

STRATEGY: 1 X 2 Ratio Vertical Spread With Calls

EXAMPLE: Buy <u>1</u> \$50 Call @ 3 <u>and</u> Sell <u>2</u> \$55 Calls @ 1 each

Stock Price at Expiration	Long Call P/(L)	Short Calls P/(L)	Total P/(L)
62			
60			
59			
58			
57			
56			
55			
54			
53			
52			
51			
50			
48			

1 X 2 RATIO VERTICAL SPREAD WITH CALLS (FRONT SPREAD)



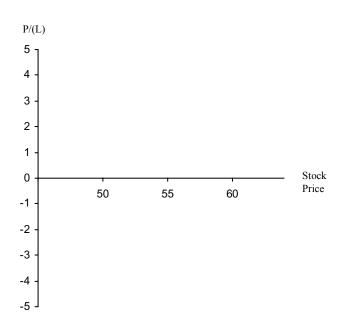
STRATEGY: 1 X 2 Ratio Volatilty Spread With Calls

EXAMPLE: Sell 1 \$50 Call @ 3 and

Buy <u>2</u> \$55 Calls @ 1 each

Stock Price Short Call Long Calls Total <u>P/(L)</u> at Expiration <u>P/(L)</u> <u>P/(L)</u> 62 60 59 58 57 56 55 54 53 52 51 50 48

1 X 2 RATIO VOLATILITY SPREAD WITH CALLS (BACK SPREAD)



Butterfly Strategies

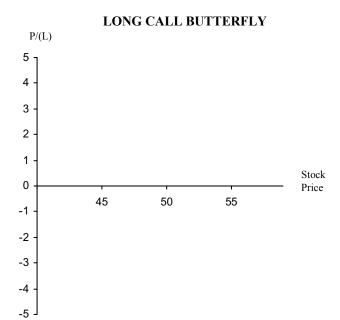
STRATEGY: Call Butterfly

EXAMPLE: Buy 1 \$45 Call @ 6 and

Sell <u>2</u> \$50 Calls @ 3 ea. <u>and</u>

Buy <u>1</u> \$55 Call @ 1

~		~. ~		
		Short Calls		Total
at Expiration	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				
44				



STRATEGY: Short Butterfly with Calls EXAMPLE: Sell <u>1</u> \$45 Call @ 6 at

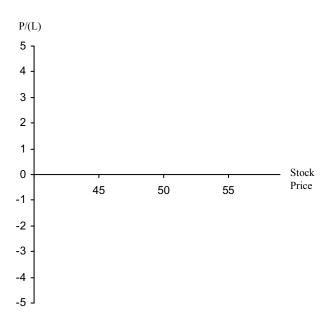
Buy 2 \$50 Calls @ 3 ea. and

Sell <u>1</u> \$55 Call @ 1

Stock Price Short Call Long Calls Short Call Total at Expiration P/(L) <u>P/(L)</u> <u>P/(L)</u> <u>P/(L)</u> 56 55 54 53 52 51 50 49 48 47

46 45 44

SHORT CALL BUTTERFLY

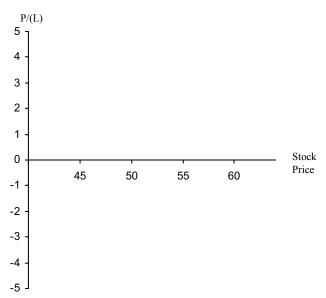


Condor Strategies

STRATEGY:	Long Condor with Calls
EXAMPLE:	Buy <u>1</u> \$45 Call @ 6 <u>and</u>
	Sell <u>1</u> \$50 Call @ 4 and
	Sell <u>1</u> \$55 Call <u>@</u> 2 <u>and</u>
	Buy <u>1</u> \$60 Call @ 1

Stock Price at Expiration	Short 50 <u>P/(L)</u>	Short 55 <u>P/(L)</u>	Long 60 <u>P/(L)</u>	Total P/(L)
62				
60				
58				
56				
55				
54				
52				
50				
48				
46				
45				
44				

LONG CALL CONDOR

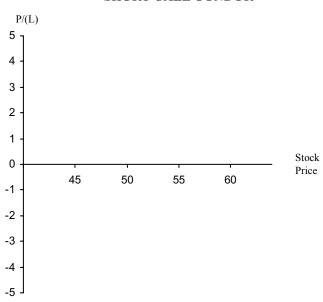


STRATEGY: Short Condor with Calls EXAMPLE: Sell 1 \$45 Call @ 6 and Buy 1 \$50 Call @ 4 and Buy 1 \$55 Call @ 2 and

Sell <u>1</u> \$60 Call @ 1

Stock Price at Expiration	Short 45 <u>P/(L)</u>	Long 50 <u>P/(L)</u>	Long 55 <u>P/(L)</u>	Short 60 <u>P/(L)</u>	Tota <u>P/(L</u>
62					
60					
58					
56					
55					
54					
52					
50					
48					
46					
45					
44					

SHORT CALL CONDOR



Iron Strategies

STRATEGY: EXAMPLE:	Iron Butterfly Buy 1 \$45 Put @ 1 and Sell 1 \$50 Put @ 3 and Sell 1 \$50 Call @ 3 and Buy 1 \$55 Call @ 1		D//I \		IRON BUT	TTERFLY	
Stock Price at Expiration P/(L) 56 55 54 53 52 51 50 49 48 47 46 45 44	Put Short Put Short Call Long Call P/(L) P/(L) P/(L) P/(L)	Total P/(L)	P/(L) 5 4 - 3 - 1	45	50	, 55	Stock Price
STRATEGY: EXAMPLE:	Iron Condor Buy 1 \$45 Put @ 1 and Sell 1 \$50 Put @ 3 and Sell 1 \$55 Call @ 3 and Buy 1 \$60 Call @ 1		P/(L)		IRON C	CONDOR	
Stock Price Long I at Expiration P/(L	Put Short Put Short Call Long Call	Total P/(L)	5]				
62			4 -				
60			3 -				
58							
56			2 -				
55			1 -				
54			0	-	 		Stock
52			,	45	50 5	5 60	Price
50			-1 -				
48			-2 -				

These strategies are presented for educational purposes only. Transaction costs may make these impractical for individual investors.

Synthetic Positions

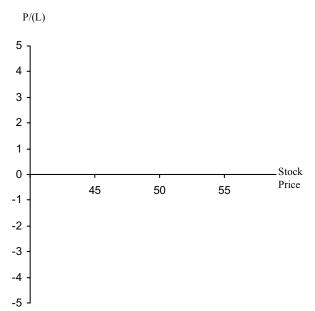
STRATEGY:	Synthetic Lon	ng Stock						
EXAMPLE:	Buy <u>1</u> \$50 Ca Sell <u>1</u> \$50 Put			P/(L)	SYNTH	ETIC LON	IG STOCK	
Stock Price at Expiration	Long Call P/(L)	Short Put P/(L)	Total P/(L)	5 4				
55 54				3 -				
53 52				2 - 1 -				
51 50				0	45	50	 55	Stock Price
49				-1 - -2 -				
48 47				-3 -				
46 45				-4 - -5				

STRATEGY: Synthetic Short Stock
EXAMPLE: Sell 1 \$50 Call @ 2 and
Buy 1 \$50 Put @ 2

Stock Price at Expiration	Short Call P/(L)	Long Put P/(L)	Total <u>P/(L)</u>
55			
54			
53			
52			
51			
50			
49			
48			
47			
46			

45

SYNTHETIC SHORT STOCK



Synthetic Positions

STRATEGY:	Synthetic Long Call				
EXAMPLE:	Buy Stock @ 50 and Buy <u>1</u> \$50 Put @ 2		P/(L)	SYNTHETIC LONG CALL	
Stock Price at Expiration 55 54 53 52 51 50 49 48 47 46 45	Long Stock Long Put P/(L) P/(L)	Total P/(L)	5 4 - 3 - 2 - 1 - 0 - 1 2 3 4 5		tock rice
STRATEGY:	Synthetic Short Call				
EXAMPLE:	Sell Stock Short @ 50 <u>and</u> Sell <u>1</u> \$50 Put @ 2		P/(L)	SYNTHETIC SHORT CALL	
Stock Price at Expiration	Short Stock Short Put P/(L) P/(L)	Total P/(L)	5		

	Sell <u>1</u> \$50 Put	i @ 2		D/(T.)	SINI	HETTE SH	OKI CALL	,
				P/(L)				
Stock Price	Short Stock	Short Put	Total	⁵]				
at Expiration	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>	4 -				
55								
54				3 -				
53				2 -				
52				1 -				
51				0			T	Stock
50				-1 -	45	50	55	Price
49				-']				
48				-2 -				
47				-3 -				
46				-4 -				
45				_5]				

Synthetic Positions

STRATEGY:	Synthetic Lon	g Put						
EXAMPLE:	Sell Stock Sho Buy <u>1</u> \$50 Cal	ort @ 50 <u>and</u> ll @ 2			SYNTH	ETIC LON	IG PUT	
		_		P/(L)				
Stock Price at Expiration	Short Stock P/(L)	Long Call P/(L)	Total <u>P/(L)</u>	5 4				
55				3 -				
54								
53				2 -				
52				1 -				
51				0		-		Stock Price
50				-1 -	45	50	55	Price
49				-2 -				
48								
47				-3 -				
46				-4 -				
45				₋₅]				
STRATEGY:	Synthetic Shor	rt Put						
STRATEGY: EXAMPLE:	Buy Stock	@ 50 <u>and</u>			SYNT	HETIC SH	ORT PUT	
		@ 50 <u>and</u>		P/(L)	SYNT	HETIC SH	ORT PUT	
EXAMPLE: Stock Price	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and	Total	P/(L) ⁵]	SYNT	НЕТІС SH	ORT PUT	
EXAMPLE: Stock Price at Expiration	Buy Stock Sell <u>1</u> \$50 Cal	@ 50 <u>and</u> ll @ 2	Total <u>P/(L)</u>		SYNT	HETIC SH	ORT PUT	
EXAMPLE: Stock Price at Expiration 55	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5	SYNT	нетіс ѕн	ORT PUT	
EXAMPLE: Stock Price at Expiration 55 54	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5 4 3	SYNT	HETIC SH	ORT PUT	
EXAMPLE: Stock Price at Expiration 55 54 53	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5	SYNT	HETIC SH	ORT PUT	
EXAMPLE: Stock Price at Expiration 55 54 53 52	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5 4 3	SYNT	HETIC SH	ORT PUT	
Stock Price at Expiration 55 54 53 52 51	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5				— Stock Price
Stock Price at Expiration 55 54 53 52 51 50	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5	SYNT.	HETIC SH	ORT PUT	Stock Price
EXAMPLE: Stock Price at Expiration 55 54 53 52 51 50 49	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5				Stock Price
Stock Price at Expiration 55 54 53 52 51 50	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5				Stock Price
EXAMPLE: Stock Price at Expiration 55 54 53 52 51 50 49 48	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5 4 - 3 - 2 - 1 2 3				Stock Price
EXAMPLE: Stock Price at Expiration 55 54 53 52 51 50 49 48 47	Buy Stock Sell <u>1</u> \$50 Cal Long Stock	@ 50 and		5				— Stock Price

ANSWERS: Call Strategies

STRATEGY:	Long Call
EXAMPLE:	Buy \$50 Call @ 3
Stock Price	Long Call
at Expiration	<u>P/(L)</u>
58	5
57	4
56	3
55	2
54	1
53	0
52	(1)
51	(2)
50	(3)

(3)

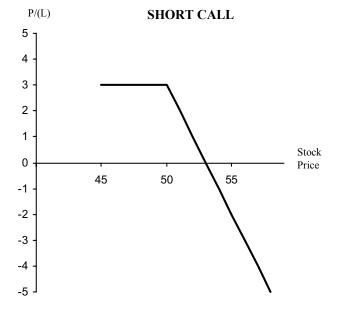
(3)

49

48

P/(L) LONG CALL
⁵]	/
4 -	
3 -	
2 -	
1 -	
0 +	Stock Price
-1 -	45 50 55
-2 -	
-3 -	/
-4 -	
₋₅]	

STRATEGY:	Short Call
EXAMPLE:	Sell \$50 Call @ 3
Stock Price	Short Call
at Expiration	<u>P/(L)</u>
58	(5)
57	(4)
56	(3)
55	(2)
54	(1)
53	0
52	1
51	2
50	3
49	3
48	3



ANSWERS: Put Strategies

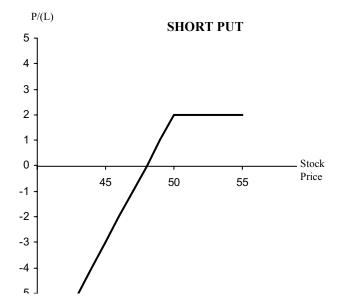
STRATEGY: Long Put Buy \$50 Put @ 2 EXAMPLE: Long Put Stock Price at Expiration <u>P/(L)</u> 53 (2) 52 (2) 51 (2) 50 (2) 49 (1) 0 48 47 46 2 45 3 44 4

5

43

P/(L)	LONG PUT	
⁵]	\	
4 -		
3 -		
2 -		
1 -		
0 -		Stock Price
-1 -	45 \ \ 50 \ 55	
-2 -		
-3 -		
-4 -		
_5]		

STRATEGY: Short Put EXAMPLE: Sell \$50 Put @ 2 Short Put Stock Price at Expiration P/(L) 53 2 2 52 51 2 50 2 49 1 0 48 47 (1) 46 (2) 45 (3) 44 (4) 43 (5)



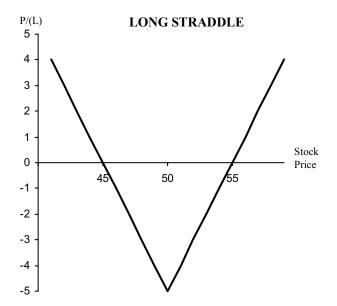
ANSWERS: Straddles

STRATEGY: Long Straddle

EXAMPLE: Buy \$50 Call @ 3 and

Buy \$50 Put @ 2

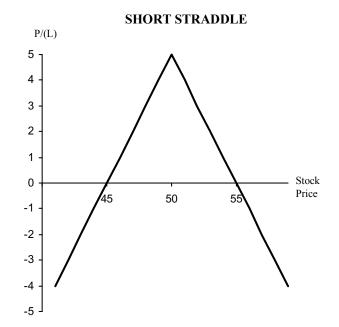
Stock Price at Expiration	Long Call <u>P/(L)</u>	Long Put P/(L)	Total <u>P/(L)</u>
59	6	(2)	4
57	4	(2)	2
55	2	(2)	0
53	0	(2)	(2)
51	(2)	(2)	(4)
50	(3)	(2)	(5)
49	(3)	(1)	(4)
47	(3)	1	(2)
45	(3)	3	0
43	(3)	5	2
41	(3)	7	4



STRATEGY: Short Straddle

EXAMPLE: Sell \$50 Call @ 3 and Sell \$50 Put @ 2

Stock Price	Short Call	Short Put	Total
at Expiration	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>
59	(6)	2	(4)
57	(4)	2	(2)
55	(2)	2	0
53	0	2	2
51	2	2	4
50	3	2	5
49	3	1	4
47	3	(1)	2
45	3	(3)	0
43	3	(5)	(2)
41	3	(7)	(4)



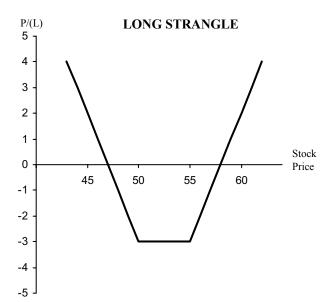
ANSWERS: Strangles

STRATEGY: Long Strangle

EXAMPLE: Buy \$55 Call @ 1 1/2 and

Buy \$50 Put @ 1 1/2

Stock Price at Expiration	Long Call <u>P/(L)</u>	Long Put $\underline{P/(L)}$	Total <u>P/(L)</u>
61	4 1/2	(1 1/2)	3
59	2 1/2	(1 1/2)	1
57	1/2	(1 1/2)	(1)
55	(1 1/2)	(1 1/2)	(3)
53	(1 1/2)	(1 1/2)	(3)
51	(1 1/2)	(1 1/2)	(3)
50	(1 1/2)	(1 1/2)	(3)
49	(1 1/2)	(1/2)	(2)
47	(1 1/2)	1 1/2	0
45	(1 1/2)	3 1/2	2
43	(1 1/2)	5 1/2	4

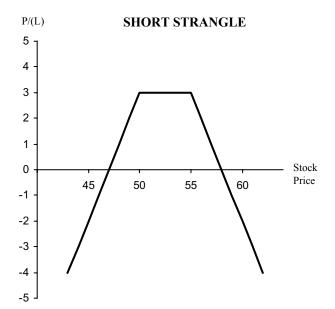


STRATEGY: Short Strangle

EXAMPLE: Sell \$55 Call @ 1 1/2 and

Sell \$50 Put @ 1 1/2

Stock Price at Expiration	Short Call P/(L)	Short Put P/(L)	Total P/(L)
61	(4 1/2)	1 1/2	(3)
59	(2 1/2)	1 1/2	(1)
57	(1/2)	1 1/2	1
55	1 1/2	1 1/2	3
53	1 1/2	1 1/2	3
51	1 1/2	1 1/2	3
50	1 1/2	1 1/2	3
49	1 1/2	1/2	2
47	1 1/2	(1 1/2)	0
45	1 1/2	(3 1/2)	(2)
43	1 1/2	(5 1/2)	(4)

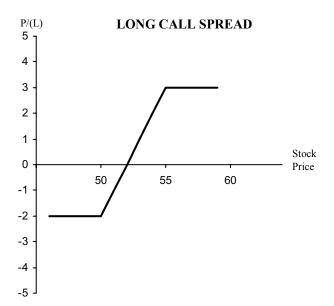


ANSWERS: Call Spreads

STRATEGY: Long Call Spread

EXAMPLE: Buy \$50 Call @ 4 and Sell \$55 Call @ 2

Stock Price at Expiration	Long Call P/(L)	Short Call P/(L)	Total P/(L)
58	4	(1)	3
57	3	0	3
56	2	1	3
55	1	2	3
54	0	2	2
53	(1)	2	1
52	(2)	2	0
51	(3)	2	(1)
50	(4)	2	(2)
49	(4)	2	(2)
48	(4)	2	(2)



STRATEGY: Short Call Spread

48

EXAMPLE: Sell \$50 Call @ 4 and Buy \$55 Call @ 2

Stock Price Short Call Long Call Total at Expiration <u>P/(L)</u> <u>P/(L)</u> <u>P/(L)</u> 58 (4) 1 (3) 57 (3) 0 (3) 56 (2) (1) (3) 55 (1) (2) (3) 54 0 (2) (2) 53 1 (2) (1) 52 2 0 (2) 3 51 (2) 2 4 50 (2) 2 49 4 (2)

4

P/(L) 5 4 3 2 1 0 -1 -2 3 4 4

SHORT CALL SPREAD

2

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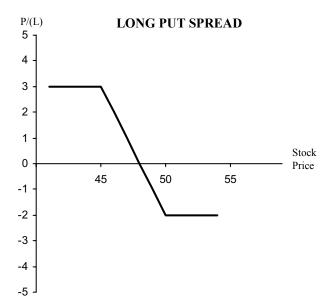
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ANSWERS: Put Spreads

STRATEGY: Long Put Spread

EXAMPLE: Buy \$50 Put @ 3 1/2 and Sell \$45 Put @ 1 1/2

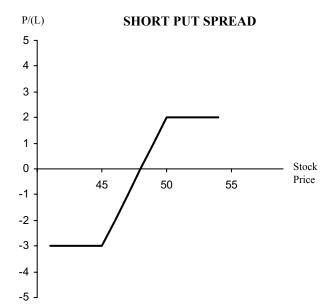
Stock Price at Expiration	Long Put P/(L)	Short Put P/(L)	Total <u>P/(L)</u>
53	(3 1/2)	1 1/2	(2)
52	(3 1/2)	1 1/2	(2)
51	(3 1/2)	1 1/2	(2)
50	(3 1/2)	1 1/2	(2)
49	(2 1/2)	1 1/2	(1)
48	(1 1/2)	1 1/2	0
47	(1/2)	1 1/2	1
46	1/2	1 1/2	2
45	1 1/2	1 1/2	3
44	2 1/2	1/2	3
43	3 1/2	(1/2)	3



STRATEGY: Short Put Spread

EXAMPLE: Sell \$50 Put @ 3 1/2 and Buy \$45 Put @ 1 1/2

Stock Price at Expiration	Short Put $P/(L)$	Long Put $\underline{P/(L)}$	Total <u>P/(L)</u>
53	3 1/2	(1 1/2)	2
52	3 1/2	(1 1/2)	2
51	3 1/2	(1 1/2)	2
50	3 1/2	(1 1/2)	2
49	2 1/2	(1 1/2)	1
48	1 1/2	(1 1/2)	0
47	1/2	(1 1/2)	(1)
46	(1/2)	(1 1/2)	(2)
45	(1 1/2)	(1 1/2)	(3)
44	(2 1/2)	(1/2)	(3)
43	(3 1/2)	1/2	(3)



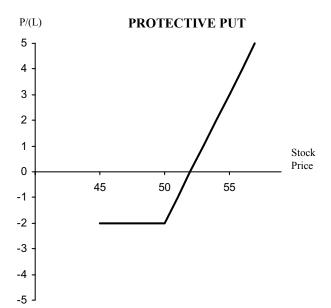
ANSWERS: Stock and Option Strategies

STRATEGY: Protective Put

EXAMPLE: Buy Stock @ 50 and

Buy \$50 Put @ 2

Stock Price at Expiration	Long Stock P/(L)	Long Put P/(L)	Total <u>P/(L)</u>
57	7	(2)	5
56	6	(2)	4
55	5	(2)	3
54	4	(2)	2
53	3	(2)	1
52	2	(2)	0
51	1	(2)	(1)
50	0	(2)	(2)
49	(1)	(1)	(2)
48	(2)	0	(2)
47	(3)	1	(2)

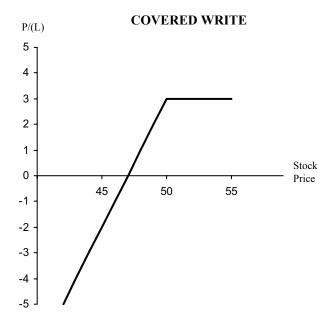


STRATEGY: Covered Write

EXAMPLE: Buy Stock @ 50 and

Sell \$50 Call @ 3

Stock Price at Expiration	Long Stock P/(L)	Short Call $\underline{P/(L)}$	Total <u>P/(L)</u>
52	2	1	3
51	1	2	3
50	0	3	3
49	(1)	3	2
48	(2)	3	1
47	(3)	3	0
46	(4)	3	(1)
45	(5)	3	(2)
44	(6)	3	(3)
43	(7)	3	(4)
42	(8)	3	(5)



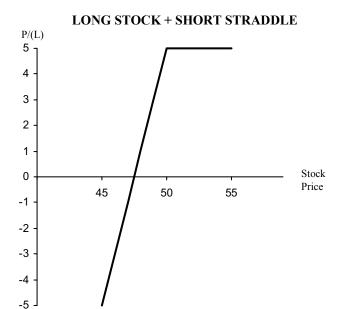
ANSWERS: Stock and Option Strategies

STRATEGY: Long Stock + Short Straddle

EXAMPLE: Buy Stock @ 50 and

Sell \$50 Call @ 3 and Sell \$50 Put @ 2

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Short Put P/(L)	Total <u>P/(L)</u>
55	5	(2)	2	5
54	4	(1)	2	5
53	3	0	2	5
52	2	1	2	5
51	1	2	2	5
50	0	3	2	5
49	(1)	3	1	3
48	(2)	3	0	1
47	(3)	3	(1)	(1)
46	(4)	3	(2)	(3)
45	(5)	3	(3)	(5)



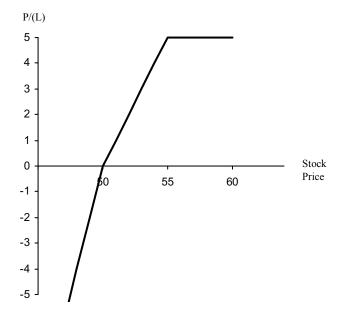
STRATEGY: Long Stock + Short Strangle

EXAMPLE: Buy Stock @ 52 and Sall 1 \$55 Call @ 1 and

Sell <u>1</u> \$55 Call @ 1 <u>and</u> Sell <u>1</u> \$50 Put @ 1

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Short Put P/(L)	Total <u>P/(L)</u>
56	4	0	1	5
55	3	1	1	5
54	2	1	1	4
53	1	1	1	3
52	0	1	1	2
51	(1)	1	1	1
50	(2)	1	1	0
49	(3)	1	0	(2)
48	(4)	1	(1)	(4)
47	(5)	1	(2)	(6)
46	(6)	1	(3)	(8)

LONG STOCK + SHORT STRANGLE



ANSWERS: Stock and Option Strategies

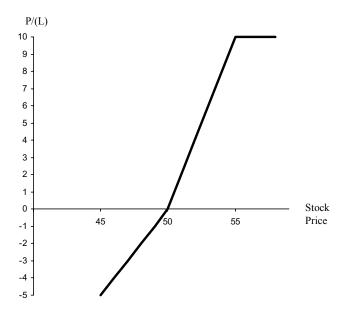
STRATEGY: Long Stock + Ratio Call Spread

EXAMPLE: Buy Stock @ 50 and

Buy <u>1</u> \$50 Call @ 3 <u>and</u> Sell <u>2</u> \$55 Calls @ 1 1/2 each

Stock Price at Expiration	Long Stock P/(L)	Long Call P/(L)	Short Calls P/(L)	Total <u>P/(L)</u>
56	6	3	1	10
55	5	2	3	10
54	4	1	3	8
53	3	0	3	6
52	2	(1)	3	4
51	1	(2)	3	2
50	0	(3)	3	0
49	(1)	(3)	3	(1)
48	(2)	(3)	3	(2)
47	(3)	(3)	3	(3)
46	(4)	(3)	3	(4)

LONG STOCK + RATIO CALL SPREAD



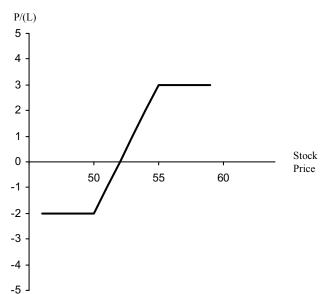
STRATEGY: Long Stock + Collar

EXAMPLE: Buy Stock @ 52 <u>and</u> Sell <u>1</u> \$55 Call @ 1 <u>and</u>

Buy 1 \$50 Put @ 1

Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Long Put $\underline{P/(L)}$	Total <u>P/(L)</u>
58	6	(2)	(1)	3
57	5	(1)	(1)	3
56	4	0	(1)	3
55	3	1	(1)	3
54	2	1	(1)	2
53	1	1	(1)	1
52	0	1	(1)	0
51	(1)	1	(1)	(1)
50	(2)	1	(1)	(2)
49	(3)	1	0	(2)
48	(4)	1	1	(2)

LONG STOCK + COLLAR

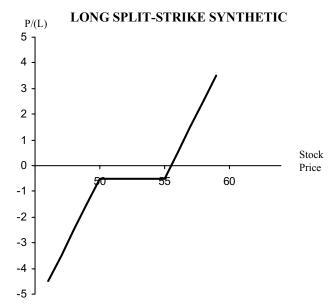


ANSWERS: Synthetic Combinations

STRATEGY: Long Split-Strike Synthetic

EXAMPLE: Buy 1 \$55 Call @ 1 1/2 and Sell 1 \$50 Put @ 1

Stock Price at Expiration	Long Call P/(L)	Short Put P/(L)	Total P/(L)
59	2 1/2	1	3 1/2
58	1 1/2	1	2 1/2
57	1/2	1	1 1/2
56	(1/2)	1	1/2
55	(1 1/2)	1	(1/2)
53	(1 1/2)	1	(1/2)
51	(1 1/2)	1	(1/2)
50	(1 1/2)	1	(1/2)
49	(1 1/2)	0	(1 1/2)
48	(1 1/2)	(1)	(2 1/2)
47	(1 1/2)	(2)	(3 1/2)

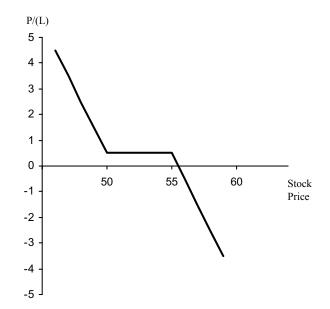


STRATEGY: Short Split-Strike Synthetic

EXAMPLE: Sell <u>1</u> \$55 Call @ 1 1/2 <u>and</u> Buy <u>1</u> \$50 Put @ 1

Stock Price	Short Call	Long Put	Total
at Expiration	<u>P/(L)</u>	<u>P/(L)</u>	<u>P/(L)</u>
59	(2 1/2)	(1)	(3 1/2)
58	(1 1/2)	(1)	(2 1/2)
57	(1/2)	(1)	(1 1/2)
56	1/2	(1)	(1/2)
55	1 1/2	(1)	1/2
53	1 1/2	(1)	1/2
51	1 1/2	(1)	1/2
50	1 1/2	(1)	1/2
49	1 1/2	0	1 1/2
48	1 1/2	1	2 1/2
47	1 1/2	2	3 1/2

SHORT SPLIT-STRIKE SYNTHETIC



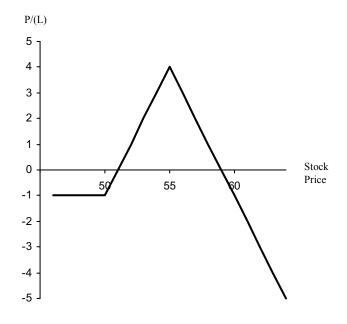
ANSWERS: Ratio Spreads

STRATEGY: 1 X 2 Ratio Vertical Spread With Calls

EXAMPLE: Buy <u>1</u> \$50 Call @ 3 <u>and</u> Sell <u>2</u> \$55 Calls @ 1 each

Stock Price at Expiration	Long Call P/(L)	Short Calls P/(L)	Total <u>P/(L)</u>
62	9	(12)	(3)
60	7	(8)	(1)
59	6	(6)	0
58	5	(4)	1
57	4	(2)	2
56	3	0	3
55	2	2	4
54	1	2	3
53	0	2	2
52	(1)	2	1
51	(2)	2	0
50	(3)	2	(1)
48	(3)	2	(1)

1 X 2 RATIO VERTICAL SPREAD WITH CALLS (FRONT SPREAD)

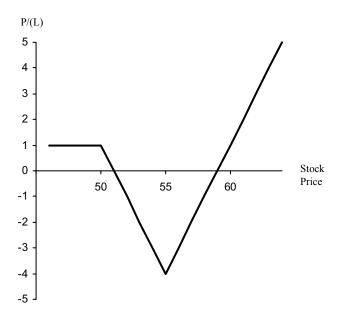


STRATEGY: 1 X 2 Ratio Volatilty Spread With Calls

EXAMPLE: Sell <u>1</u> \$50 Call @ 3 <u>and</u> Buy <u>2</u> \$55 Calls @ 1 each

Stock Price at Expiration	Short Call P/(L)	Long Calls P/(L)	Total P/(L)
62	(9)	12	3
60	(7)	8	1
59	(6)	6	0
58	(5)	4	(1)
57	(4)	2	(2)
56	(3)	0	(3)
55	(2)	(2)	(4)
54	(1)	(2)	(3)
53	0	(2)	(2)
52	1	(2)	(1)
51	2	(2)	0
50	3	(2)	1
48	3	(2)	1

1 X 2 RATIO VOLATILITY SPREAD WITH CALLS (BACK SPREAD)



ANSWERS: Butterfly Strategies

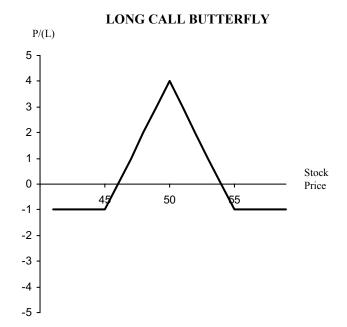
STRATEGY: Call Butterfly

EXAMPLE: Buy 1 \$45 Call @ 6 and

Sell <u>2</u> \$50 Calls @ 3 ea. <u>and</u>

Buy <u>1</u> \$55 Call <u>@</u> 1

Stock Price at Expiration	Long Call P/(L)	Short Calls P/(L)	Long Call P/(L)	Total <u>P/(L)</u>
56	5	(6)	0	(1)
55	4	(4)	(1)	(1)
54	3	(2)	(1)	0
53	2	0	(1)	1
52	1	2	(1)	2
51	0	4	(1)	3
50	(1)	6	(1)	4
49	(2)	6	(1)	3
48	(3)	6	(1)	2
47	(4)	6	(1)	1
46	(5)	6	(1)	0
45	(6)	6	(1)	(1)
44	(6)	6	(1)	(1)



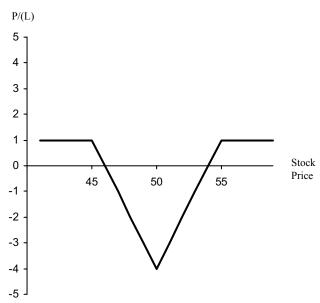
STRATEGY: Short Butterfly with Calls EXAMPLE: Sell 1 \$45 Call @ 6 a

Buy 2 \$50 Calls @ 3 ea. and

Sell <u>1</u> \$55 Call <u>@</u> 1

Stock Price at Expiration		Long Calls P/(L)	Short Call P/(L)	Total P/(L)
56	(5)	6	0	1
55	(4)	4	1	1
54	(3)	2	1	0
53	(2)	0	1	(1)
52	(1)	(2)	1	(2)
51	0	(4)	1	(3)
50	1	(6)	1	(4)
49	2	(6)	1	(3)
48	3	(6)	1	(2)
47	4	(6)	1	(1)
46	5	(6)	1	0
45	6	(6)	1	1
44	6	(6)	1	1

SHORT CALL BUTTERFLY

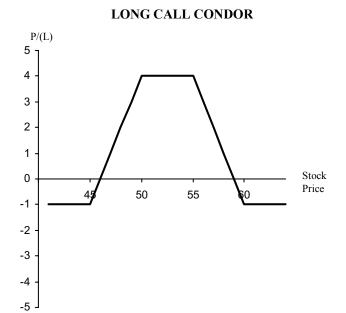


ANSWERS: Condor Strategies

STRATEGY: Long Condor with Calls EXAMPLE: Buy 1 \$45 Call @ 6 and Sell 1 \$50 Call @ 4 and

Sell <u>1</u> \$55 Call @ 2 and Buy <u>1</u> \$60 Call @ 1

Stock Price at Expiration	_	Short 50 <u>P/(L)</u>	Short 55 <u>P/(L)</u>	Long 60 <u>P/(L)</u>	Total P/(L)
62	11	(8)	(5)	1	(1)
60	9	(6)	(3)	(1)	(1)
58	7	(4)	(1)	(1)	1
56	5	(2)	1	(1)	3
55	4	(1)	2	(1)	4
54	3	0	2	(1)	4
52	1	2	2	(1)	4
50	(1)	4	2	(1)	4
48	(3)	4	2	(1)	2
46	(5)	4	2	(1)	0
45	(6)	4	2	(1)	(1)
44	(6)	4	2	(1)	(1)

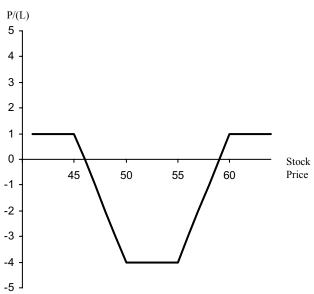


STRATEGY: Short Condor with Calls Sell 1 \$45 Call @ 6 and EXAMPLE: Buy 1 \$50 Call @ 4 and Buy 1 \$55 Call @ 2 and

Sell <u>1</u> \$60 Call @ 1

Stock Price at Expiration	Short 45 <u>P/(L)</u>	Long 50 <u>P/(L)</u>	Long 55 <u>P/(L)</u>	Short 60 <u>P/(L)</u>	Total <u>P/(L)</u>
62	(11)	8	5	(1)	1
60	(9)	6	3	1	1
58	(7)	4	1	1	(1)
56	(5)	2	(1)	1	(3)
55	(4)	1	(2)	1	(4)
54	(3)	0	(2)	1	(4)
52	(1)	(2)	(2)	1	(4)
50	1	(4)	(2)	1	(4)
48	3	(4)	(2)	1	(2)
46	5	(4)	(2)	1	0
45	6	(4)	(2)	1	1
44	6	(4)	(2)	1	1

SHORT CALL CONDOR



ANSWERS: Iron Strategies

IRON BUTTERFLY

IRON CONDOR

Stock Price

Stock Price

STRATEGY: Iron Butterfly

EXAMPLE: Buy <u>1</u> \$45 Put @ 1 <u>and</u> Sell <u>1</u> \$50 Put @ 3 <u>and</u>

Sell <u>1</u> \$50 Put <u>@ 3 and</u> Sell <u>1</u> \$50 Call <u>@ 3 and</u> Buy <u>1</u> \$55 Call <u>@ 1</u>

		<i>-</i>	0			P/(L)		
Stock Price at Expiration		Short Put P/(L)	Short Call P/(L)	Long Call P/(L)	Total P/(L)	5		
56	(1)	3	(3)	0	(1)	4 -		\wedge
55	(1)	3	(2)	(1)	(1)	3 -		/\
54	(1)	3	(1)	(1)	0	2 -	,	/
53	(1)	3	0	(1)	1	4	/	
52	(1)	3	1	(1)	2	1 -		
51	(1)	3	2	(1)	3	0		
50	(1)	3	3	(1)	4	-1 -	45	50
49	(1)	2	3	(1)	3	2		
48	(1)	1	3	(1)	2	-2 -		
47	(1)	0	3	(1)	1	-3 -		
46	(1)	(1)	3	(1)	0	-4 -		
45	(1)	(2)	3	(1)	(1)	_5]		
44	0	(3)	3	(1)	(1)	-u -		

STRATEGY: Iron Condor

EXAMPLE: Buy <u>1</u> \$45 Put @ 1 <u>and</u> Sell <u>1</u> \$50 Put @ 3 <u>and</u>

Sell <u>1</u> \$55 Call @ 3 <u>and</u> Buy <u>1</u> \$60 Call @ 1

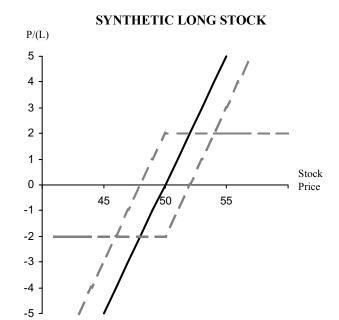
						` /		
Stock Price at Expiration	-	Short Put P/(L)	Short Call P/(L)	Long Call P/(L)	Total <u>P/(L)</u>	5]		
62	(1)	3	(4)	0	(1)	4 -		\neg
60	(1)	3	(2)	(1)	(1)	3 -	/	\
58	(1)	3	0	(1)	1	2 -	/	\
56	(1)	3	2	(1)	3			\
55	(1)	3	3	(1)	4	7 1		\
54	(1)	3	3	(1)	4	0 +		· · ·
52	(1)	3	3	(1)	4	-1	4 9 50	55
50	(1)	3	3	(1)	4			
48	(1)	1	3	(1)	2	-2 -		
46	(1)	(1)	3	(1)	0	-3 -		
45	(1)	(2)	3	(1)	(1)	-4 -		
44	0	(3)	3	(1)	(1)	_5]		

P/(L)

ANSWERS: Synthetic Positions

STRATEGY: Synthetic Long Stock EXAMPLE: Buy $\underline{1}$ \$50 Call @ 2 and Sell $\underline{1}$ \$50 Put @ 2

Stock Price at Expiration	Long Call P/(L)	Short Put $\underline{P/(L)}$	Total <u>P/(L)</u>
55	3	2	5
54	2	2	4
53	1	2	3
52	0	2	2
51	(1)	2	1
50	(2)	2	0
49	(2)	1	(1)
48	(2)	0	(2)
47	(2)	(1)	(3)
46	(2)	(2)	(4)
45	(2)	(3)	(5)



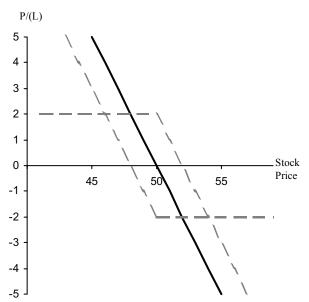
STRATEGY: Synthetic Short Stock

EXAMPLE: Sell <u>1</u> \$50 Call @ 2 and

Buy <u>1</u> \$50 Put @ 2

SYNTHETIC SHORT STOCK

Stock Price at Expiration	Short Call P/(L)	Long Put P/(L)	Total <u>P/(L)</u>
55	(3)	(2)	(5)
54	(2)	(2)	(4)
53	(1)	(2)	(3)
52	0	(2)	(2)
51	1	(2)	(1)
50	2	(2)	0
49	2	(1)	1
48	2	0	2
47	2	1	3
46	2	2	4
45	2	3	5



ANSWERS: Synthetic Positions

STRATEGY:	Synthetic Lon	g Call			
EXAMPLE:	Buy Stock Buy <u>1</u> \$50 Put	@ 50 and t @ 2		P/(L)	SYNTHETIC LONG CALL
Stock Price at Expiration	Long Stock P/(L)	Long Put P/(L)	Total <u>P/(L)</u>	5]	\ / /
55	5	(2)	3	4 -	
54	4	(2)	2	3 -	
53	3	(2)	1	2 -	
52	2	(2)	0	1 -	
51	1	(2)	(1)	0	Stock
50	0	(2)	(2)		45 \ 50 \ 55
49	(1)	(1)	(2)	-1 -	X
48	(2)	0	(2)	-2 -	
47	(3)	1	(2)	-3 -	,
46	(4)	2	(2)	-4 -	,
45	(5)	3	(2)	_5	,

STRATEGY: Synthetic Short Call

EXAMPLE: Sell Stock Short @ 50 and

Sell <u>1</u> \$50 Put @ 2

SYNTHETIC SHORT CALL

	_ _ +	- 😊 –			STATILETIC SHOKT CALL
Stock Price at Expiration	Short Stock P/(L)	Short Put P/(L)	Total <u>P/(L)</u>	P/(L) 5]	\
55	(5)	2	(3)	4 -	\
54	(4)	2	(2)	3 -	\
53	(3)	2	(1)	2	
52	(2)	2	0		
51	(1)	2	1	1 -	×
50	0	2	2	0 +	
49	1	1	2	-1 -	45 50 55
48	2	0	2	-2 -	Stock
47	3	(1)	2	-3 -	Price
46	4	(2)	2		/
45	5	(3)	2	-4 -	
				5	

ANSWERS: Synthetic Positions

STRATEGY:	Synthetic Lon	ng Put			
EXAMPLE:	Sell Stock Sho Buy <u>1</u> \$50 Ca	ort @ 50 <u>and</u> ill @ 2		P/(L)	SYNTHETIC LONG PUT
Stock Price at Expiration 55 54	Short Stock <u>P/(L)</u> (5) (4)	Long Call P/(L) 3	Total <u>P/(L)</u> (2) (2)	5] 4 - 3 -	
53 52	(3) (2)	1 0	(2) (2)	2 -	
51 50	(1)	(1) (2)	(2) (2)	0 -1 -	45 50 55 Stock Price
49 48	1 2	(2) (2)	(1) 0	-2 =	
47 46	3 4	(2) (2)	1 2	-3 -	
45	5	(2)	3	₋₅]	(
STRATEGY:	Synthetic Sh	nort Put			
EXAMPLE:	Buy Stock Sell <u>1</u> \$50 C	@ 50 <u>and</u>		D/(I.)	SYNTHETIC SHORT PUT

STIGITE ST.	Symmetre Sinc	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
EXAMPLE:	Buy Stock Sell <u>1</u> \$50 Ca	@ 50 <u>and</u> ill @ 2		P/(L)	SYNTHETIC SHORT PUT
Stock Price at Expiration	Long Stock P/(L)	Short Call P/(L)	Total P/(L)	5	,
55	5	(3)	2	4 -	/
54	4	(2)	2	3 -	/
53	3	(1)	2	2	
52	2	0	2	1 -	X
51	1	1	2	0	Stock
50	0	2	2		45 50 55 Price
49	(1)	2	1	-1 -	
48	(2)	2	0	-2 -	
47	(3)	2	(1)	-3 -	
46	(4)	2	(2)	-4 -	
45	(5)	2	(3)	_	



ABOUT OIC

The Options Industry Council (OIC) is an industry cooperative funded by OCC, the world's largest equity derivatives clearing organization and sole central clearinghouse for U.S. listed options. OIC's mission is to provide free and unbiased education to investors and financial advisors about the benefits and risks of exchange-traded equity options. Our goal is to provide a financially sound and efficient marketplace where investors can hedge investment risk and find new opportunities to profit from market participation. Managed by OCC, OIC delivers its education through the Options Education Program, a structured platform offering live seminars, self-directed online courses, videos, podcasts, webinars and live help. OIC's resources can be accessed online at Options Education.org.

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publication, nor does OIC warrant the suitability of this information for any particular purpose. Prior to buying or selling an option, you must receive a copy of Characteristics and Risks of Standardized Options. Copies of this document may be obtained from your broker, from any exchange on which options are traded, by emailing investorservices@theocc.com, or by visiting www.OptionsEducation.org.



On behalf of OCC and The Options Industry Council (OIC), we are pleased to introduce the Options Strategies Quick Guide. This guide outlines a range of strategies for investing with options.

As the foundation for secure markets, it is important for OCC to ensure that the listed options markets remain vibrant, resilient and liquid in the eyes of regulators and the investing public. We believe that education is the key to prudent options investing, and that the tremendous growth of the U.S. listed options markets in recent years can be attributed, at least in part, to the value of this education. We always are available to answer your questions and help you expand your knowledge of the listed options markets. For more information, or to contact OIC, please visit our website at OptionsEducation.org or emailing us at options@theocc.com

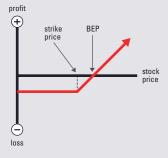
Thank you,

Craig Donohue
Executive Chairman and Chief Executive Officer, OCC

Mary Savoie Executive Director, OIC



HOW TO USE THIS BOOK



- Each strategy has an accompanying graph showing profit and loss at expiration.
- The vertical axis shows the profit/loss scale.
- When the strategy line is below the horizontal axis, it assumes you paid for the position or had a loss. When it is above the horizontal axis, it assumes you received a credit for the position or had a profit.
- The dotted line indicates the strike price.
- The intersection of the strategy line and the horizontal axis is the break-even point (BEP) not including transaction costs, commissions, or margin (borrowing) costs.
- These graphs are not drawn to any specific scale and are meant only for illustrative and educational purposes.
- The risks/rewards described are generalizations and may be lesser or greater than indicated.

TERMS AND DEFINITIONS

Break-Even Point (BEP): The stock price(s) at which an option strategy results in neither a profit nor loss.

Call: An option contract that gives the holder the right to buy the underlying security at a specified price for a certain, fixed period of time.

In-the-money: A call option is in-the-money if the strike price is less than the market price of the underlying security. A put option is in-the-money if the strike price is greater than the market price of the underlying security.

Long position: A position wherein an investor is a net holder in a particular options series.

Out-of-the-money: A call option is out-of-the-money if the strike price is greater than the market price of the underlying security. A put option is out-of-the-money if the strike price is less than the market price of the underlying security.

Premium: The price a put or call buyer must pay to a put or call seller (writer) for an option contract. Market supply and demand forces determine the premium.

Put: An option contract that gives the holder the right to sell the underlying security at a specified price for a certain, fixed period of time.

Ratio Spread: A multi-leg option trade of either all calls or all puts whereby the number of long options to short options is something other than 1:1. Typically, to manage risk, the number of short options is lower than the number of long options (i.e. 1 short call: 2 long calls).

Short position: A position wherein the investor is a net writer (seller) of a particular options series.

Strike price or exercise price: The stated price per share for which the underlying security may be purchased (in the case of a call) or sold (in the case of a put) by the option holder upon exercise of the option contract.

Synthetic position: A strategy involving two or more instruments that has the same risk/reward profile as a strategy involving only one instrument.

Time decay or erosion: A term used to describe how the time value of an option can "decay" or reduce with the passage of time.

Volatility: A measure of the fluctuation in the market price of the underlying security. Mathematically, volatility is the annualized standard deviation of returns.



bull strategy | LONG CALL

Example: Buy call

Market Outlook: Bullish

Risk: Limited

Reward: Unlimited

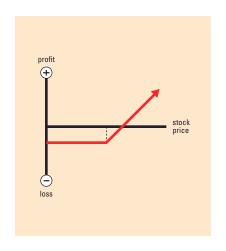
Increase in Volatility:

Helps position

Time Erosion: Hurts position

BEP: Strike price plus

premium paid



Example: Buy 1 call; sell 1 call at higher strike

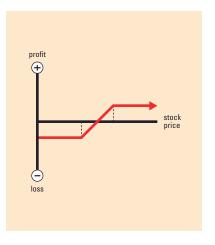
Market Outlook: Bullish

Risk: Limited **Reward:** Limited

Increase in Volatility: Helps or hurts depending on strikes chosen

Time Erosion: Helps or hurts depending on strikes chosen

BEP: Long call strike plus net premium paid



Example: Sell 1 put;

buy 1 put at lower strike with same expiry

Market Outlook:

Neutral to bullish

Risk: Limited

Reward: Limited

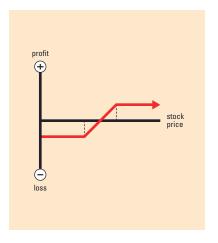
Increase in Volatility:

Typically hurts position slightly

Time Erosion: Helps position

BEP: Short put strike minus

credit received



Example: Buy stock; sell calls on a share-for-share basis

Market Outlook: Neutral to slightly bullish

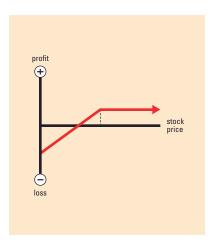
Risk: Limited, but substantial (risk is from a fall in stock price)

Reward: Limited

Increase in Volatility: Hurts position

Time Erosion: Helps position

BEP: Starting stock price minus premium received



bull strategy | PROTECTIVE/MARRIED PUT

Example: Own 100 shares of

stock; buy 1 put

Market Outlook: Cautiously

bullish

Risk: Limited

Reward: Unlimited

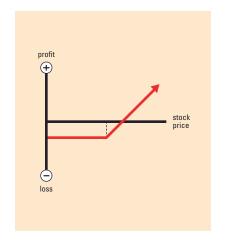
Increase in Volatility:

Helps position

Time Erosion: Hurts position

BEP: Starting stock price

plus premium paid



Example: Sell 1 put; hold cash equal to strike price x 100

Market Outlook: Neutral to slightly bullish

Risk: Limited, but substantial

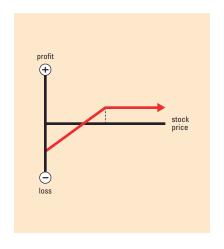
Reward: Limited

Increase in Volatility:

Hurts position

Time Erosion: Helps position

BEP: Strike price minus premium received



Example: Buy put

Market Outlook: Bearish

Risk: Limited

Reward: Limited, but substantial

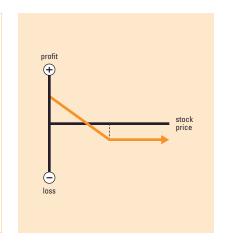
Increase in Volatility:

Helps position

Time Erosion: Hurts position

BEP: Strike price minus

premium paid



Example: Sell 1 put; buy 1 put at higher strike

Market Outlook: Bearish

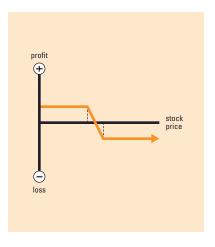
Risk: Limited
Reward: Limited

Increase in Volatility:

Helps or hurts depending on strikes chosen

Time Erosion: Helps or hurts depending on strikes chosen

BEP: Long put strike minus net premium paid



Example: Sell 1 call; buy 1 call at higher strike

Market Outlook: Neutral to bearish

Risk: Limited

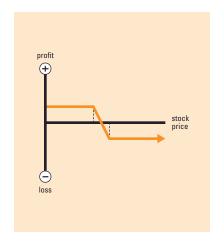
Reward: Limited

Increase in Volatility:
Typically hurts position slightly

Time Erosion: Helps position

BEP: Short call strike plus

credit received





Example: Own stock, protect by purchasing 1 put and selling 1 call with a higher strike

Market Outlook: Neutral to slightly bullish

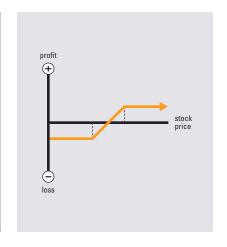
Risk: Limited

Reward: Limited

Increase in Volatility: Effect varies, none in most cases

Time Erosion: Effect varies

BEP: In principle, breaks even if, at expiration, the stock is above/(below) its initial level by



neutral strategy | SHORT STRADDLE

Example: Sell 1 call;

sell 1 put at same strike

Market Outlook: Neutral

Risk: Unlimited

Reward: Limited

Increase in Volatility:

Hurts position

Time Erosion: Helps position

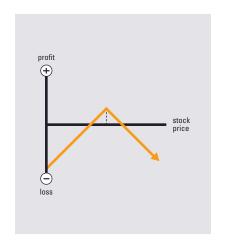
BEP: Two BEPs

1. Call strike plus premium

received

2. Put strike minus premium

received



neutral strategy | SHORT STRANGLE

Example: Sell 1 call with higher strike; sell 1 put with lower strike

Market Outlook: Neutral

Risk: Unlimited
Reward: Limited

Increase in Volatility:

Hurts position

Time Erosion: Helps position

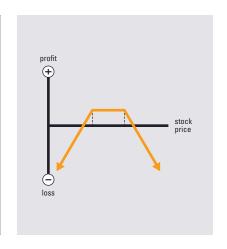
BEP: Two BEPs

1. Call strike plus premium

received

2. Put strike minus premium

received



Example: Sell 1 call; buy 1 call at higher strike; sell 1 put; buy 1 put at lower strike; all options have the same expiry. Underlying price typically between short call and short put strikes.

Market Outlook: Range bound

or neutral

Risk: Limited

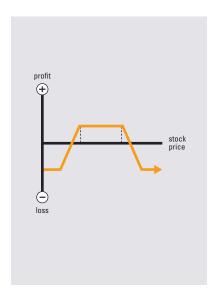
Reward: Limited

Increase in Volatility: Typically hurts position

Time Erosion: Helps position

BEP: Two BEPs

- 1. Short call strike plus credit received
- 2. Short put strike minus credit received



Example: Sell 1 call; buy 1 call at same strike but longer expiration; also can be done with puts

Market Outlook: Near term neutral (if strikes = stock price); can be slanted bullish (with OTM call options) or bearish (with OTM put options)

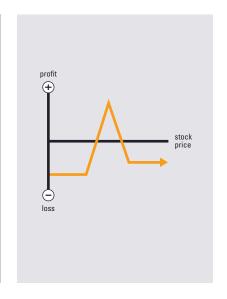
Risk: Limited

Reward: Limited; substantial after near term expiry

Increase in Volatility: Helps position

Time Erosion: Helps until near term option expiry

BEP: Varies; after near term expiry long call strike plus debit paid or (if done with puts) long put strike minus debit paid



Example: Own stock; sell one call; sell one put; underlying price typically between short call and short put strikes

Market Outlook: Range bound or neutral, moderately bullish; willing to buy more shares and sell existing shares

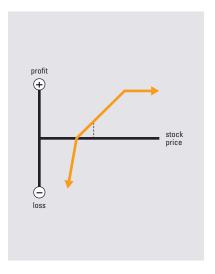
Risk: Limited, but substantial

Reward: Limited

Increase in Volatility: Typically hurts position

Time Erosion: Typically helps position

BEP: Initial stock price (or average price if assigned) minus net premium received



Example: Sell 2 calls;

buy 1 call at next lower strike; buy 1 call at next higher strike (the strikes are equidistant)

Market Outlook: Neutral around strike

Risk: Limited
Reward: Limited

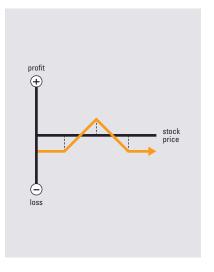
Increase in Volatility:Typically hurts position

Time Erosion: Typically helps position

BEP: Two BEPs

Lower long call strike plus
net premium paid
 Higher long call strike min

2. Higher long call strike minus net premium paid



Example: Buy 1 call; buy 1 put at same strike

Market Outlook: Large move

in either direction

Risk: Limited

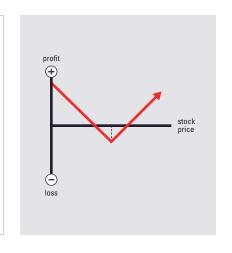
Reward: Unlimited

Increase in Volatility: Helps position

Time Erosion: Hurts position

BEP: Two BEPs

- 1. Call strike plus premium paid
- 2. Put strike minus premium paid



Example: Buy 1 call with higher strike; buy 1 put with lower strike

Market Outlook: Large move in either direction

Risk: Limited

Reward: Unlimited

Increase in Volatility:

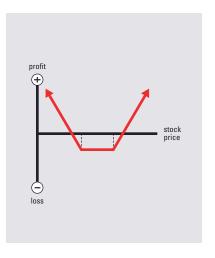
Helps position

Time Erosion: Hurts position

BEP: Two BEPs

1. Call strike plus premium paid

2. Put strike minus premium paid



volatility strategy | CALL BACKSPREAD

Example: Sell 1 call; buy 2 calls at higher strike

Market Outlook: Bullish

Risk: Limited

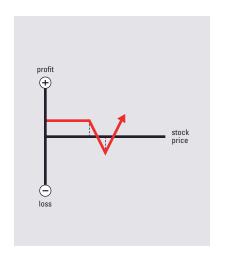
Reward: Unlimited

Increase in Volatility: Typically helps position

Time Erosion:

Typically hurts position

BEP: Varies, depends if established for a credit or debit. If done for a credit, two BEP's with the lower BEP being the short strike plus the credit



Example: Sell 1 put; buy 2 puts at lower strike

Market Outlook: Bearish

Risk: Limited

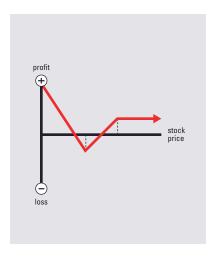
Reward: Limited, but substantial

Increase in Volatility: Typically

helps position

Time Erosion: Typically hurts position

BEP: Varies, depends if established for a credit or debit. If done for a credit, two BEP's and the higher BEP is the short strike minus the credit







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www.OptionsEducation.org

