Figure 2.1

Opti	ons C	hain		\$	120.	.00 c	all o	otion	bid and ask								Total Red	cords: 30
Calls						//			Thu Apr 01 2021 ^	Puts								
Last	Net	Bid	Ask	Vol	IV/	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
2.97	-1.68	2.95	3.05	2,318	0,34	0.81	0.09	1853	AAPL 117.000	0.28	+0.05	0.27	0.28	22,456	0.33	-0.17	0.09	7027
2.15	-1.6	2.15	2.18	4,172	0.32	0.73	0.12	2709	AAPL 118.000	0.47	+0.135	0.46	0.47	16,470	0.31	-0.27	0.12	8964
1.46	-1.445	1.45	1.48	14,316	0.3	0.6	0.14	2756	AAPL 119.000	0.76	+0.255	0.76	0.77	25,973	0.3	-0.4	0.14	13856
0.9	-1.26	0.89	0.9	62,979	0.29	0.46	0.15	10885	AAPL 120.000	1.2	+0.445	1.19	1.21	22,204	0.29	-0.55	0.15	21914
0.49	-1.025	0.48	0.49	44,793	0.28	0.31	0.14	23217	AAPL 121.000	1.79	+0.675	1.77	1.81	6,356	0.27	-0.7	0.14	17907
0.25	-0.74	0.24	0.25	32,214	0.28	0.18	0.11	21544	AAPL 122.000	2.58	+0.99	2.51	2.57	1,698	0.27	-0.82	0.11	6360

Figure 2.2

Opti	ons C	hain														I	otal Rec	ords: 30
										\$22	5.00	put	opti	on b	id ar	nd as	k	
Calls									Thu Apr 01 2021 ^	Puts		/	1					
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	As (Vol	IV	Delta	Gamma	Int
7	-3.15	6.85	8.35	107	0.02	1	0.03	383	MSFT 225.000	0.21	+0.01	0.12	0.21	1,815	0.3	-0.08	0.03	3364
4.45	-3.325	4.7	5.5	211	0.24	0.87	0.05	709	MSFT 227.500	0.36	+0.03	0.32	0.43	2,346	0.27	-0.16	0.05	2553
3.26	-2.265	2.79	3.25	3,192	0.21	0.74	0.09	1556	MSFT 230.000	0.94	+0.345	0.65	0.81	5,240	0.25	-0.31	0.08	6580
1.52	-1.905	1.4	1.6	9,472	0.21	0.48	0.11	2529	MSFT 232.500	2.06	+0.97	1.55	1.9	2,986	0.25	-0.52	0.09	3407
0.56	-1.295	0.52	0.6	15,475	0.21	0.23	0.08	8509	MSFT 235.000	3.5	+1.435	2.98	3.9	1,177	0.26	-0.73	0.07	4651
0.23	-0.625	0.2	0.25	4,643	0.23	0.1	0.04	6260	MSFT 237.500	5.6	+2.05	4.7	6.25	191	0.29	-0.85	0.05	1925

Figure 2.3

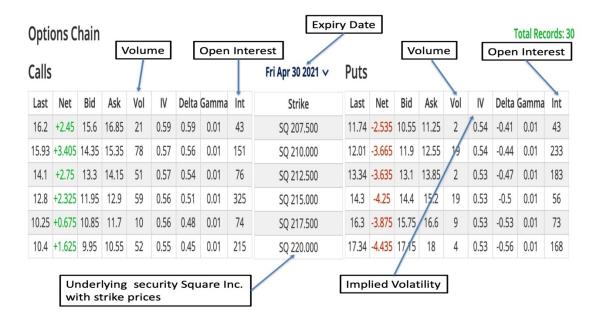


Figure 3.1

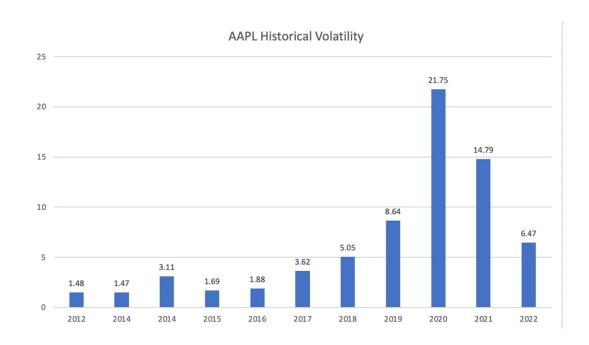


Figure 3.2



Figure 6.1



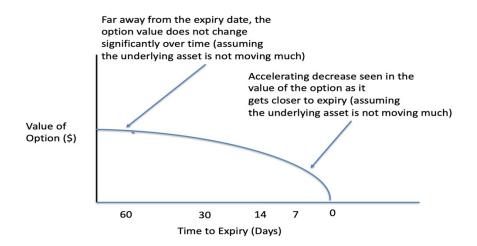


Figure 9.1



Figure 9.2



Figure 9.3

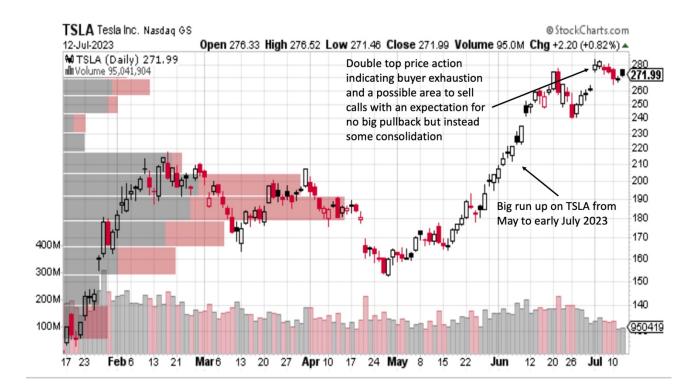


Table 10.1

	Option purchase	Option sale	Net option cost
Strike price of call option used	\$245.00	\$255.00	
Call option price	Buy for +\$7.00	Sell for -\$3.00	\$4.00
Break-even price	\$252.00		\$245.00+\$4.00=\$249.00

Figure 10.1

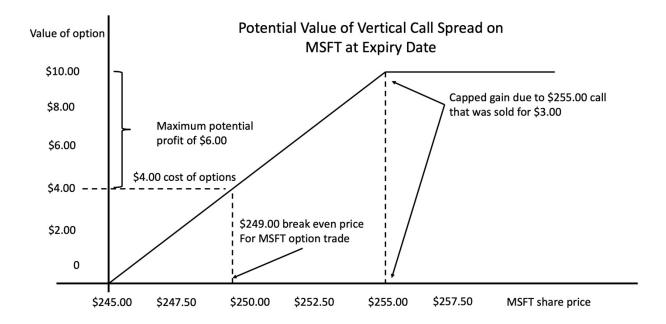


Table 10.2

	Option purchase	Option sale	Net option cost
Strike price of put	\$245.00	\$230.00	
Put option price	Buy for +\$7.00	Sell for -\$2.50	\$4.50
Break-even price	\$238.00		\$245.00-\$4.50=\$240.50

Figure 10.2

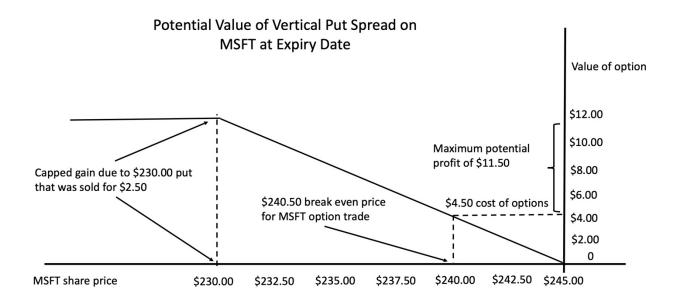


Figure 10.3



Figure 10.4

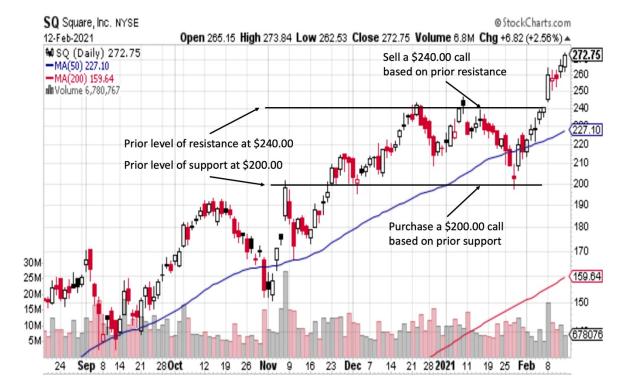


Figure 10.5



Figure 11.1



Figure 11.2



Figure 12.1



Figure 12.2



Figure 12.3

Calls									Fri Aug 18 2023 ^	Puts		/	-			to buy strike	at ~ \$4 price	1.00
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
16.04	-0.335	16.25	16.4	45	0.35	0.7275	0.0149	1732	META 302.500	4	-0.125	3.85	3.9	248	0.35	-0.2742	0.015	2193
14.15	-0.475	14.5	14.6	194	0.35	0.6891	0.016	2934	META 305.000	4.61	-0.29	4.55	4.65	695	0.35	-0.3129	0.0161	4481
12.7	-0.3	12.8	12.95	223	0.34	0.6481	0.0169	377	META 307.500	5.63	-0.12	5.4	5.45	161	0.34	-0.3543	3 0.0171	2929
11.35	-0.1	11.25	11.35	634	0.34	0.6048	0.0177	19342	META 310.000	6.35	-0.35	6.3	6.4	912	0.34	-0.3981	0.0179	16061
9.9	-0.15	9.85	9.9	551	0.34	0.5598	0.0182	1281	META 312.500	7.4	-0.4	7.35	7.45	440	0.34	-0.4436	0.0185	886
8.65	-0.1	8.5	8.6	1,524	0.34	0.5139	0.0185	4186	META 315.000	8.8	-0.2	8.55	8.65	957	0.34	-0.4901	0.0188	3613
7.25	-0.35	7.3	7.4	360	0.33	0.4677	0.0186	1229	META 317.500	9.92	-0.43	9.85	9.95	385	0.33	-0.537	0.0188	890
6.35	-0.175	6.25	6.35	630	0.33	0.422	0.0183	6020	META 320.000	11.35	-0.45	11.3	11.4	319	0.33	-0.5835	0.0187	2332
5.3	-0.3	5.3	5.4	346	0.33	0.3775	0.0179	1493	META 322.500	13.2	-0.15	12.85	12.95	214	0.33	-0.6289	0.0182	890
4.51	-0.215	4.45	4.55	595	0.33	0.3348	0.0171	4117	META 325.000	15	-0.025	14.5	14.65	114	0.33	-0.6725	0.0175	1144

Figure 12.4



Figure 13.1

Options Chain
Option chain of AAPL just before earnings release on August 3, 2023

Total Records: 24

0.76 -0.7487 0.0394 5986

Calls									Fri Aug 04 2023 ^	Puts								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
7.7	-0.975	7.8	7.85	908	0.83	0.7928	0.0328	2741	AAPL 185.000	1.02	+0.225	1.02	1.03	18,605	0.83	-0.2073	0.0328	15095
5.93	-0.82	5.95	6.05	1,365	0.82	0.7	0.0401	1777	AAPL 187.500	1.69	+0.335	1.68	1.69	12,089	0.83	-0.3001	0.0401	10600
4.45	-0.575	4.4	4.45	6,765	0.83	0.5922	0.045	13162	AAPL 190.000	2.61	+0.45	2.6	2.61	24,194	0.83	-0.408	0.045	31691
3.08	-0.545	3.05	3.1	19,212	0.81	0.477	0.0467	14157	AAPL 192.500	3.75	+0.525	3.75	3.8	8,362	0.82	-0.5233	0.0467	13580
1 99	-0.47	108	1 00	2// 802	n 79	0 3611	0.0448	/3120	AADI 105 000	5 17	+0 595	5 15	5.2	4 620	n 79	-U 6303	0 0449	17601

AAPL 197.500

6.9

+0.75 6.8

6.9

926

AAPL trading close to \$192.00 therefore \$192.50 is the closest strike price Purchase call at \$3.08 and purchase put at \$3.75

Figure 13.2

Options chain of AAPL just after the earnings release on August 3, 2023

Calls									Fri Aug 04 2023 ^	Puts								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
14.65	-8.975	13.7	15.3	248	3.98	0.9985	0.001	113	AAPL 167.500	0.01	-0.045	0	0.01	181	4.03	-0.0015	0.001	11852
12.4	-8.75	11.6	12.8	1,339	3.33	0.9982	0.0014	1382	AAPL 170.000	0.01	-0.075	0	0.01	2,140	3.38	-0.0018	0.0014	31227
9.7	-8.975	9	10.3	492	2.68	0.9977	0.0021	194	AAPL 172.500	0.01	-0.095	0	0.01	1,316	2.72	-0.0023	0.0021	7651
7.01	-9.215	6.2	7.8	784	2.03	0.9969	0.0036	696	AAPL 175.000	0.01	-0.145	0	0.01	4,682	2.05	-0.0031	0.0036	14192
4.65	-9.15	3.75	5.3	963	1.36	0.9954	0.0077	295	AAPL 177.500	0.01	-0.225	0	0.01	7,007	1.38	-0.0046	0.0077	9867
2	-9.45	1.76	2.27	4,521	0.88	0.9904	0.0299	3636	AAPL 180.000	0.01	-0.375	0	0.01	42,340	0.68	-0.0096	0.0299	43272
0.01	-9.24	0	0.01	26,247	0.21	0.1613	0.481	1830	AAPL 182.500	0.48	-0.195	0.48	0.55	107,929	0	-0.8387	0.481	15296
0.01	-7.215	0	0.01	103,583	0.95	0.0068	0.0158	2486	AAPL 185.000	3.03	+1.875	2.97	3.1	117,484	0	-0.9932	0.0158	23975
0.01	-5.465	0	0.01	129,933	1.61	0.0041	0.006	1739	AAPL 187.500	5.55	+3.665	5.2	5.85	36,056	0	-0.9959	0.006	14837
0.01	-3.965	0	0.01	107,158	2.22	0.003	0.0032	17961	AAPL 190.000	8.05	+5.18	7.95	8.8	39,431	0	-0.997	0.0032	32275
0.01	2 675	0	0.01	33,799	2.82	0.0024	0.0021	22041	AAPL 192.500	10.5	+6.4	10.45	11.3	8,855	0	-0.9976	0.0021	13680
0.01	-1.685	0	0.01	17,057	3.39	0.002	0.0014	46986	AAPL 195.000	12.95	+7.325	12.55	13.65	5,493	0	-0.998	0.0014	15782

AAPL closes at \$182.00. The \$192.50 call expires worthless while the \$192.50 put sells at \$10.50 netting a nice profit on the trade

Option chain of AAPL just before earnings release on August 3, 2023

Options Chain Total Records: 24

Calls									Fri Aug 04 2023 ^		Puts								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike		Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
7.7	-0.975	7.8	7.85	908	0.83	0.7928	0.0328	2741	AAPL 185.000		1.02	+0.225	1.02	1.03	18,605	0.83	-0.2073	0.0328	15095
5.93	-0.82	5.95	6.05	1,365	0.82	0.7	0.0401	1777	AAPL 187.500	/	1.69	+0.335	1.68	1.69	12,089	0.83	-0.3001	0.0401	10600
4.45	-0.575	4.4	4.45	6,765	0.83	0.5922	0.045	13162	AAPL 190.000		2.61	+0.45	2.6	2.61	24,194	0.83	-0.408	0.045	31691
3.08	-0.545	3.05	3.1	19,212	0.81	0.477	0.0467	14157	AAPL 192.500		3.75	+0.525	3.75	3.8	8,362	0.82	-0.5233	0.0467	13580
1.99	-0.47	1.98	1.99	24,892	0.79	0.3611	0.0448	43120	AAPL 195,000		5.17	± 0.5 95	5.15	5.2	4,620	0.79	-0.6393	0.0449	17691
1.17	-0.385	1.17	1.18	17,176	0.77	0.252	0.0394	20355	AAPL 197.500	_	6.9	+0.75	6.8	6.9	926	0.76	-0.7487	0.0394	5986

AAPL price is close to \$192.00 at the end of the day. You could initiate a strangle by purchasing an OTM \$197.50 call for \$1.17 and purchasing an OTM \$185.00 put for \$1.02

Figure 13.4

Options chain of AAPL just after the earnings release on August 3, 2023

Calls									Fri Aug 04 2023 ^	Puts								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
14.65	-8.975	13.7	15.3	248	3.98	0.9985	0.001	113	AAPL 167.500	0.01	-0.045	0	0.01	181	4.03	-0.0015	0.001	11852
12.4	-8.75	11.6	12.8	1,339	3.33	0.9982	0.0014	1382	AAPL 170.000	0.01	-0.075	0	0.01	2,140	3.38	-0.0018	0.0014	31227
9.7	-8.975	9	10.3	492	2.68	0.9977	0.0021	194	AAPL 172.500	0.01	-0.095	0	0.01	1,316	2.72	-0.0023	0.0021	7651
7.01	-9.215	6.2	7.8	784	2.03	0.9969	0.0036	696	AAPL 175.000	0.01	-0.145	0	0.01	4,682	2.05	-0.0031	0.0036	14192
4.65	-9.15	3.75	5.3	963	1.36	0.9954	0.0077	295	AAPL 177.500	0.01	-0.225	0	0.01	7,007	1.38	-0.0046	0.0077	9867
2	-9.45	1.76	2.27	4,521	0.88	0.9904	0.0299	3636	AAPL 180.000	0.01	-0.375	0	0.01	42,340	0.68	-0.0096	0.0299	43272
0.01	-9.24	0	0.01	26,247	0.21	0.1613	0.481	1830	AAPL 182.500	0.48	-0.195	0.48	0.55	107,929	0	-0.8387	0.481	15296
0.01	-7.215	0	0.01	103,583	0.95	0.0068	0.0158	2486	AAPL 185.000	3.03	+1.875	2.97	3.1	117,484	0	-0.9932	0.0158	23975
0.01	-5.465	0	0.01	129,933	1.61	0.0041	0.006	1739	AAPL 187.500	5.55	+3.665	5.2	5.85	36,056	0	-0.9959	0.006	14837
0.01	-3.965	0	0.01	107,158	2.22	0.003	0.0032	17961	AAPL 190.000	8.05	+5.18	7.95	8.8	39,431	0	-0.997	0.0032	32275
0.01	2 675	0	0.01	33,799	2.82	0.0024	0.0021	22041	AAPL 192,500	10.5	+6.4	10.45	11.3	8,855	0	-0.9976	0.0021	13680
0.01	-1.685	0	0.01	17,057	3 39	0.002	0.0014	46986	AAPL 195.000	12.95	+7.325	12.55	13.65	5,493	0	-0.998	0.0014	15782

AAPL closes at \$182.00. The \$197.50 call expire worthless while the \$185.00 put sells at \$3.03 netting a nice profit on the trade

Figure 13.5

Option chain of AAPL just before earnings release on August 3, 2023

Options Chain

AAPL trading close to \$192.00 therefore \$192.50 is the closest strike price; sell a put at \$3.75 and purchase an OTM put at \$1.69

Total Records: 24

Calls									Fri Avs 04 2023 ^		outs								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike		Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
7.7	-0.975	7.8	7.85	908	0.83	0.7928	0.0328	2741	AAPL 185.000		1.02	+0.225	1.02	1.03	18,605	0.83	-0.2073	0.0328	15095
5.93	-0.82	5.95	6.05	1,365	0.82	0.7	0.0401	1777	AAPL 187.500	`	1.69	+0.335	1.68	1.69	12,089	0.83	-0.3001	0.0401	10600
4.45	-0.575	4.4	4.45	6,765	0.83	0.5922	0.045	13162	AAPL 190.000	/	2.61	+0.45	2.6	2.61	24,194	0.83	-0.408	0.045	31691
3.08	-0.545	3.05	3.1	19,212	0.81	0.477	0.0467	14157	AAPL 192.500		3.75	+0.525	3.75	3.8	8,362	0.82	-0.5233	0.0467	13580
1.99	-0.47	1.98	199	24,892	0.79	0.3611	0.0448	43120	AAPL 195.000		5.17	+0.595	5.15	5.2	4,620	0.79	-0.6393	0.0449	17691
1.17	-0 385	1.17	1.18	17,176	0.77	0.252	0.0394	20355	AAPL 197.500		6.9	+0.75	6.8	6.9	926	0.76	-0.7487	0.0394	5986

AAPL trading close to \$192.00 therefore \$192.50 is the closest strike price; sell a call at \$3.08 and purchase an OTM call at \$1.17

Table 13.1

Position	Credit/Debit before news	Value after news	Result of trades
Short \$192.50	+\$308.00	\$0.00	+\$308.00
call	+3308.00	\$0.00	+5306.00
Long \$197.50 call	-\$117.00	\$0.00	-\$117.00
Short \$192.50	+\$375.00	+\$1050.00	-\$675.00 (you were short
put			so it's a loss)
Long \$187.50	-\$169.00	+\$555.00	+\$386.00
put			
Net	+ \$398.00		-\$98.00

Figure 14.1



Figure 14.2

Opti	ons C	hain			Орио	iii ciia	017.		ter the earnings rele	uoc 0.	, rugu		-025			Т	otal Red	ords:
Calls									Fri Nov 17 2023 ^	Puts								
Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int	Strike	Last	Net	Bid	Ask	Vol	IV	Delta	Gamma	Int
28.54	+0.865	28.65	28.9	6	0.29	0.8752	0.0076	1007	AAPL 155.000	1.81	-0.18	1.81	1.85	537	0.29	-0.1282	0.0077	4877
24.56	+1.11	24.35	24.6	586	0.28	0.8362	0.0096	3298	AAPL 160.000	2.43	-0.23	2.44	2.46	547	0.28	-0.1684	0.0098	7394
20.35	+0.9	20.3	20.5	71	0.27	0.7865	0.0117	2677	AAPL 165.000	3.29	-0.285	3.25	3.35	222	0.26	-0.2197	0.0121	7239
16.61	+0.885	16.45	46.7	336	0.26	0.7248	0.014	3427	AAPL 170.00	4.47	-0.355	4.4	4.5	1,021	0.25	-0.2839	0.0146	8508
13.3	+0.925	13.05	13.25	820	0.25	0.6514	0.0161	6132	AAPL 175.000	5.96	-0.44	5.9	6	2,197	0.24	-0.3614	0.017	8348
10.05	+0.675	10	10.1	4,544	0.24	0.5677	0.0177	13978	AAPL 180.000	7.85	-0.575	7.8	7.9	4,171	0.23	-0.4513	0.0191	19407
7.44	+0.565	7.35	7.45	598	0.23	0.4775	0.0185	9846	AAPL 185.000	10.15	-0.8	10.2	10.3	268	0.23	-0.5508	0.0206	8471
5.3	+0.425	5.2	5.3	713	0.22	0.3861	0.0183	21369	AAPL 190.000	13	-1.025	13.05	13.25	113	0.22	-0.6556	0.0211	16049
3.65	+0.325	3.55	3.65	560	0.22	0.2994	0.017	18128	AAPL 195.080	6.75	-0.975	16.6	16.8	24	0.21	-0.7602	0.0208	12530
2.41	+0.19	2.4	2.41	2,141	0.21	0.2227	0.0148	17398	AAPL 209.000	20.6	-1.325	20.65	21.5	2	0.22	-0.8599	0.0197	3684

AAPL trading price is close to \$179.00 on August 8th – apply a stock replacement strategy by purchasing an deep ITM call for a cost of \$24.56 instead of buying AAPL shares

Figure 15.1



Figure 15.2



Table 15.1

Your Expected Price Reaction After News Release	Strategy Used	Risk	Reward
Little price change	Sell an ATM or OTM put and/or call	Potential for a large loss if the price changes a lot	Keep the premium collected from the sale
Little price change	Sell a vertical spread ATM or OTM put and/or call	Losses are capped if the price change is unexpectedly large	Keep the premium but it will be less because of the added options purchases
Large price move up or down (agnostic to direction)	Straddle - buy put and call ATM	Loss on investment if there is no big price move	Large price move sees one option price go up more that the loss seen with the other
Large price move up or down (agnostic to direction)	Strangle (buy a put and call OTM)	Loss on investment if there is no big price move	Large price move sees one option price go up more that the loss seen with the other
Large change up	Buy an OTM call	Loss on investment if security does not move up a lot	Potential for large profit on big move up
Large change up	Vertical call spread	Loss on investment if security does not move up a lot	Potential for large profit on big move up
Large change down	Buy OTM put	Loss on investment if security does not move down a lot	Potential for large profit on big move down
Large change down	Vertical put spread	Loss on investment if security does not move down a lot	Potential for large profit on big move down

Figure 15.3



Figure 15.4



Table 15.2

Your Expected Price Move Several Days after a News Release	Strategy Used	Risk	Reward
Little price change after a big move in either direction	Sell a put and/or call	Potential for a large loss if the price changes a lot	Keep the premium collected from the sale
Little price change after a big move in either direction	Sell vertical call spread and/or vertical put spread	Potential for loss but they are capped if the price changes a lot	Keep the premium but it will be less because of the added option purchases
Price drop, bottoming and then a reversal in trend back up after a sell off	Buy a call close to ITM	If a significant trend reversal does not happen – call expires worthless	Profits will be good if there is a large price reversal back up
Price drop, bottoming and then a reversal in trend back up after a sell off	Sell an OTM put at or just below the established low	If bottom has not been established then you could see a significant loss on the position	Put expires worthless and you keep the premium from sale of put
Price drop, bottoming and then a reversal trend back up after a sell off	Use a bullish vertical call spread	If a bottom has not been established then there are smaller losses due to lower cost of trade	Profit capped with the vertical call spread due to sale of OTM call
Price rise, topping and then a reversal trend back down after a buying spree	Buy a put close to ITM	If a significant trend reversal does not happen – put expires worthless	Profits will be good if there is a large price reversal back down
Price rise, topping and then a reversal in trend back down after a buying spree	Sell an OTM call at or just above the established high	If top has not been established then you could see a significant loss on the position	Call expires worthless and you keep the premium from sale of put
Price rise, topping and then a reversal in trend back down after a buying spree	Use a bearish vertical put spread	If a top has not been established then there are smaller losses due to lower cost of trade	Profit capped with the vertical put spread due to sale of OTM put

Figure 16.1



Figure 17.1

