

The background of the slide is a blurred image of a financial candlestick chart with a grid. The chart is primarily green and blue, with some yellow and orange highlights. The title 'Option Trading' is centered in a large, white, sans-serif font. Below the title is a subtitle in a smaller, white, sans-serif font. There are several decorative circles of different colors (blue, green, orange, yellow) scattered around the edges of the slide.

# Option Trading

(and why you shouldn't do it...but it is kinda fun....but  
you really shouldn't do it....)



# Disclaimer

- Its Kevin again, do you own due diligence.
- Don't take investment advice from a frog boi
- Part of this is to scare you, but also inform you.

# Options are Super Confusing

- “I’m long 2 contracts on the SPY September out of the money calls at 415”
- “I’m naked short 1 contract on the SPY September in the money put at 415”
- “I’m short 1 contract on the SPY September covered out of the money calls at 415”
- Option Chains
- Numbers be like wut?
  - Lots of 100
  - Quoted at a per share bases



[View All Expiration Dates](#)

<	SEP 30 (Q)	OCT 21	NOV 18	DEC 16	DEC 30 (Q)	DEC 30 (W)	2023 JAN 20	MAR 17	>
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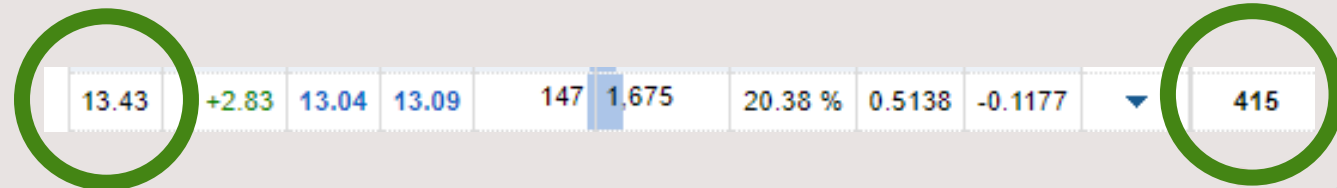
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Last	Change	Bid	Ask	Volume	Open Int	Imp Vol	Delta	Theta	Action	Strike ▲	Action	Last	Change	Bid	Ask	Volume	Open Int	Imp Vol	Delta	Theta	
<div><div>—</div><div>CALLS</div><div>Sep 30 '22 (58 days)</div><div>PUTS</div></div>																					
16.73	+3.38	16.03	16.10	912	8,605	21.08 %	0.5728	-0.12	▼	410	▼	11.96	-3.24	11.93	11.97	4,088	2,867	21.09 %	-0.4409	-0.1183	
15.99	+3.20	15.40	15.47	2,653	1,321	20.93 %	0.5614	-0.1197	▼	411	▼	11.81	-3.47	12.31	12.35	655	5,524	20.95 %	-0.4523	-0.1179	
15.30	+3.12	14.78	14.85	193	1,425	20.78 %	0.5498	-0.1193	▼	412	▼	12.51	-3.62	12.71	12.75	223	1,208	20.78 %	-0.4638	-0.1174	
14.72	+3.02	14.18	14.25	98	3,902	20.64 %	0.538	-0.1189	▼	413	▼	12.67	-3.46	13.11	13.15	403	3,977	20.65 %	-0.4755	-0.1169	
14.25	+2.22	13.61	13.66	68	1,220	20.52 %	0.526	-0.1183	▼	414	▼	13.60	-2.81	13.53	13.58	256	1,603	20.50 %	-0.4874	-0.1162	
13.43	+2.83	13.04	13.09	147	1,675	20.38 %	0.5138	-0.1177	▼	415	▼	13.87	-3.20	13.96	14.01	706	899	20.36 %	-0.4994	-0.1155	
12.87	+0.86	12.47	12.52	77	1,512	20.26 %	0.5015	-0.117	▼	416	▼	13.92	-3.82	14.41	14.46	328	954	20.22 %	-0.5115	-0.1147	
12.60	+1.14	11.93	11.97	51	1,029	20.09 %	0.4891	-0.1161	▼	417	▼	14.55	-3.10	14.87	14.92	208	3,449	20.08 %	-0.5238	-0.1137	
12.07	+1.62	11.39	11.44	114	688	19.98 %	0.4767	-0.1152	▼	418	▼	14.64	-3.64	15.35	15.39	323	1,198	19.98 %	-0.5361	-0.1128	
11.25	+2.36	10.87	10.92	274	1,257	19.87 %	0.4641	-0.1142	▼	419	▼	15.07	-4.79	15.84	15.88	174	1,533	19.83 %	-0.5486	-0.1116	

☐ in the money

# What is an option contract?

- A derivative that is based on the value of a security like stocks (ticker symbol)
- An option (not an obligation) to buy or sell a lot (100 shares) of stock to a buyer or seller
- Contract has a “strike price”
- Contract has an expiration date
- Options trade in lots of 100 shares per contract
- Zero sum investing. Always a winner, always a loser.



13.43	+2.83	13.04	13.09	147	1,675	20.38 %	0.5138	-0.1177	▼	415
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\$100,000



Sally Homeowner

Weird flex  
but ok.

I'll pay you \$400 for  
the option to buy  
your home for  
\$110,000 in the next  
3 months

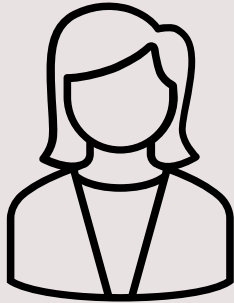


Johnny OptionBoi

# 2 Months Later



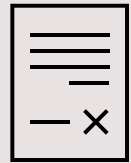
\$100,000  
or  
\$90,000



Sally Homeowner

\$400

-\$400



\$0

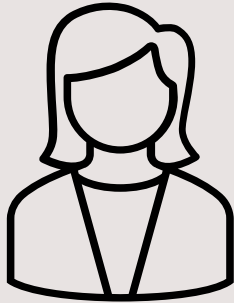
Johnny OptionBoi

# 2 Months Later



\$110,000

\$110,400



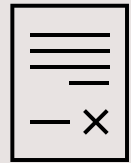
Sally Homeowner

\$400

-\$400



Johnny OptionBoi



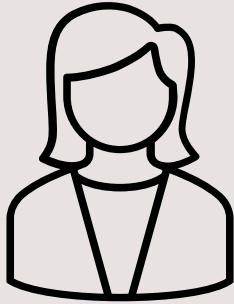
\$0



# 2 Months Later

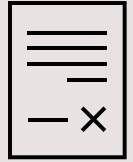


\$120,000



Sally Homeowner

\$400



\$10,000

-\$400



Johnny OptionBoi

- Johnny can now buy the home for **\$110,000** and immediately sell it for **\$120,000**
- Johnny can just sell the option contract to another individual for **\$10,000**

# Calls and Puts and Long and Short

- Calls is an option to buy (not an obligation) a given stock at a set price in a set time
- Put is the option to sell (not the obligation) a given stock at a set price in a set time
- Can go “long” or “short” on either contract
  - Long is the buyer of the option
  - Short is the seller of the option

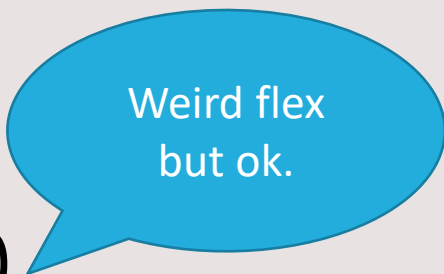
	Long	Short
Call	Buy option to buy stock in the future.  <b>Wants stock to go up!</b>	Sell Option for someone to buy stock from you in the future.  <b>Wants stock to stay the same or go down</b>
Put	Buy option to sell stock in the future.  <b>Wants the stock to go down!</b>	Sell option to buy stock at a lower price in the future.  <b>Want stock to stay same or go up!</b>



\$100,000



Sally Homeowner



Long



I'll pay you \$400 for  
the option to buy  
your home for  
\$110,000 in the next  
3 months

Strike

Expiration

Option Premium

Call



Johnny OptionBoi

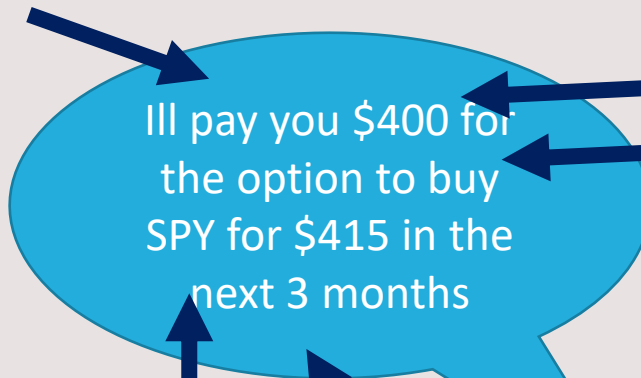
Covered
100 shares SPY
\$41,445
Uncovered (naked)
0 shares SPY
\$0



Sally Homeowner



Long



Strike

Expiration

Option Premium

Call



Johnny OptionBoi

# Value/Premium of an option

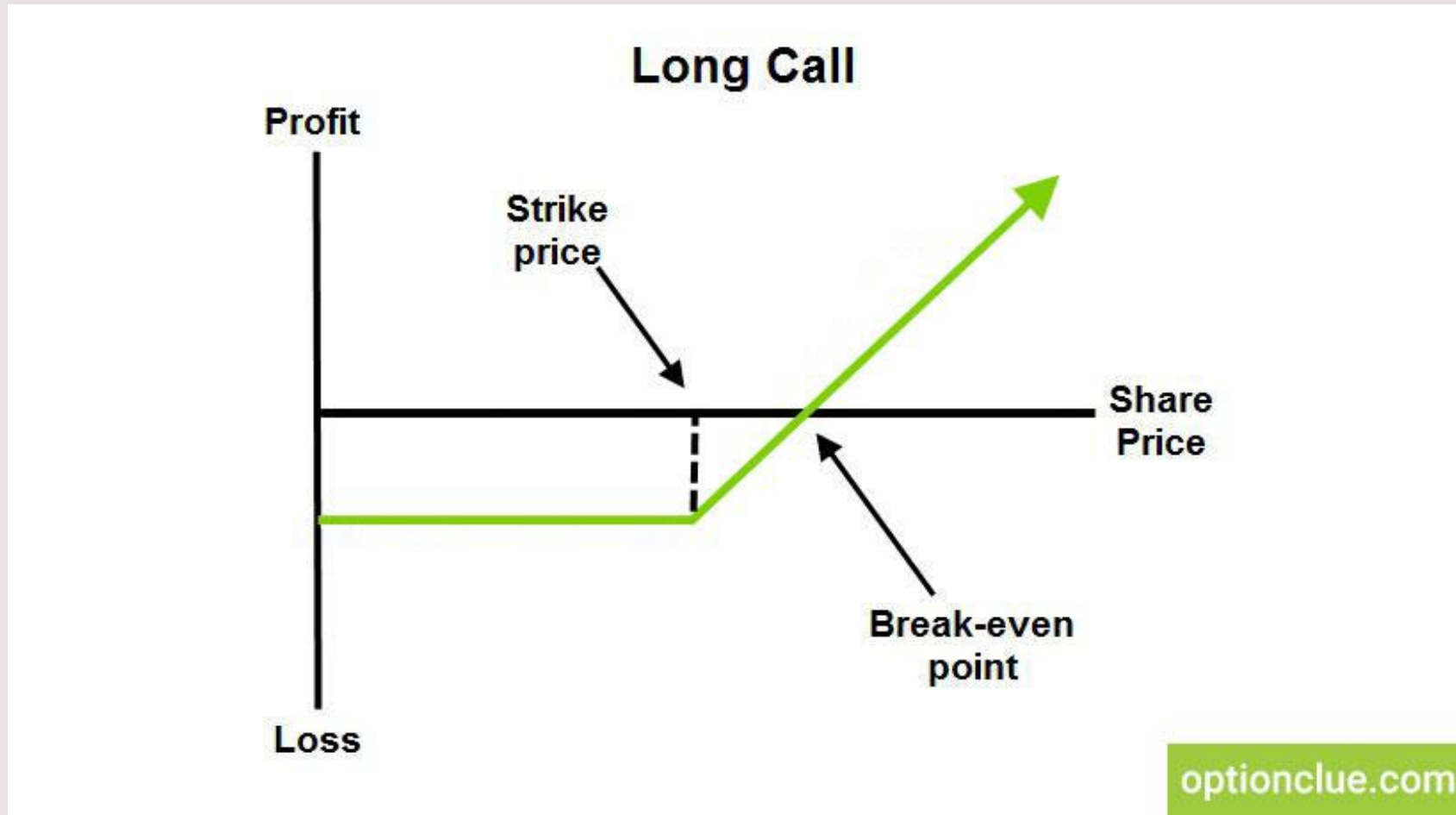
- Why did Sally and Johnny agree on \$400 as a contract price/premium?
- Time – The more time, the longer the stock has to hit the strike
  - SPY \$415 strike expiring today vs expiring 2 years from now
- Volatility – the more volatile a stock, the more likely it is to hit the strike

Last	Change	Bid	Ask	Volume	Open Int	Imp Vol	Delta	Theta	Action	Strike ▲
CALLS										Sep 30 '22 (58 d)
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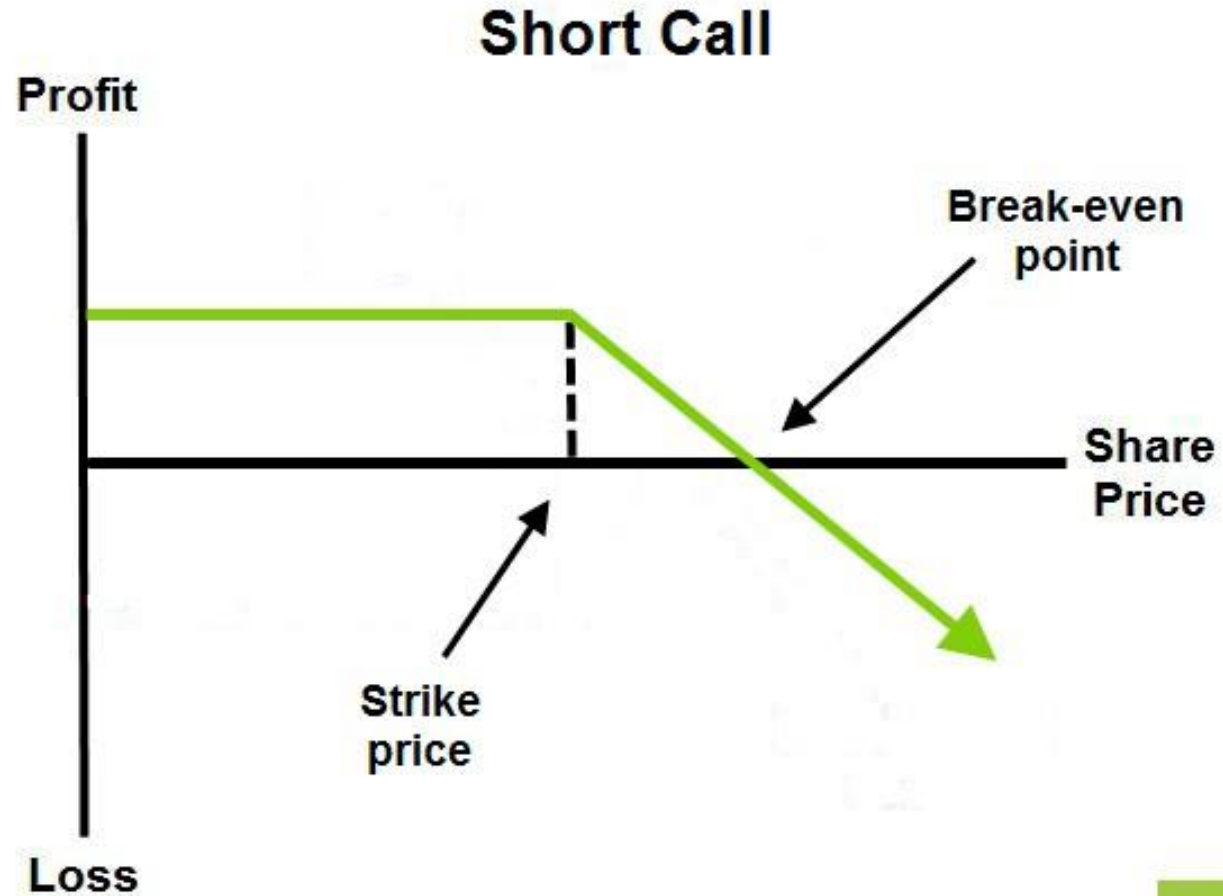
- Current Stock Price \$414.45
- Value of option is \$16.73???
- Strike of 410 has an **intrinsic value** of \$4.45 but **extrinsic value** of \$12.28

“Based on the volatility of this stock and time left in the option, the market is willing to pay \$12 because this option to take this risk on. “

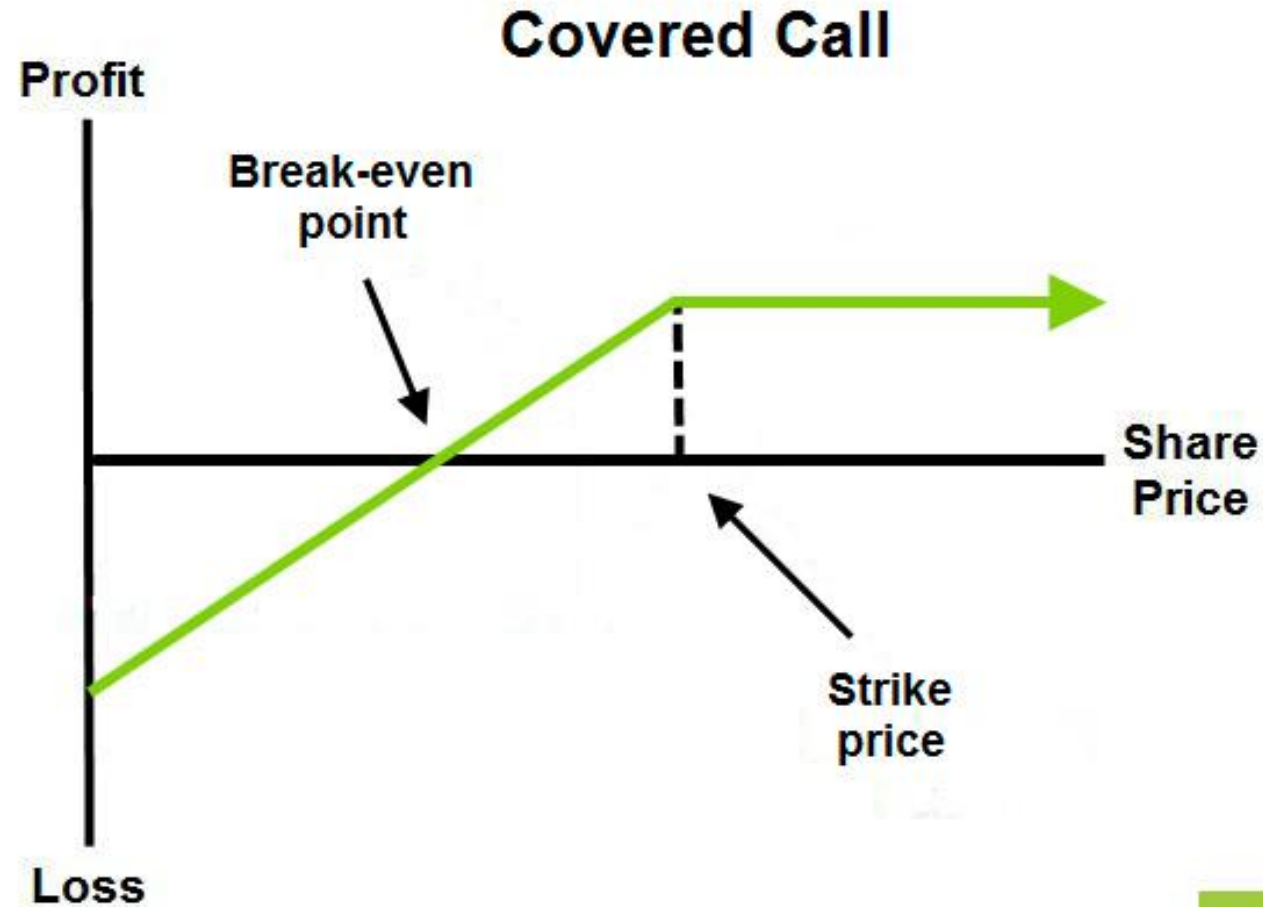
# Visualizing the Long Call Strategy



# Visualizing the Short Call



# Visualizing the Covered Call





# How do you know what trade to place?

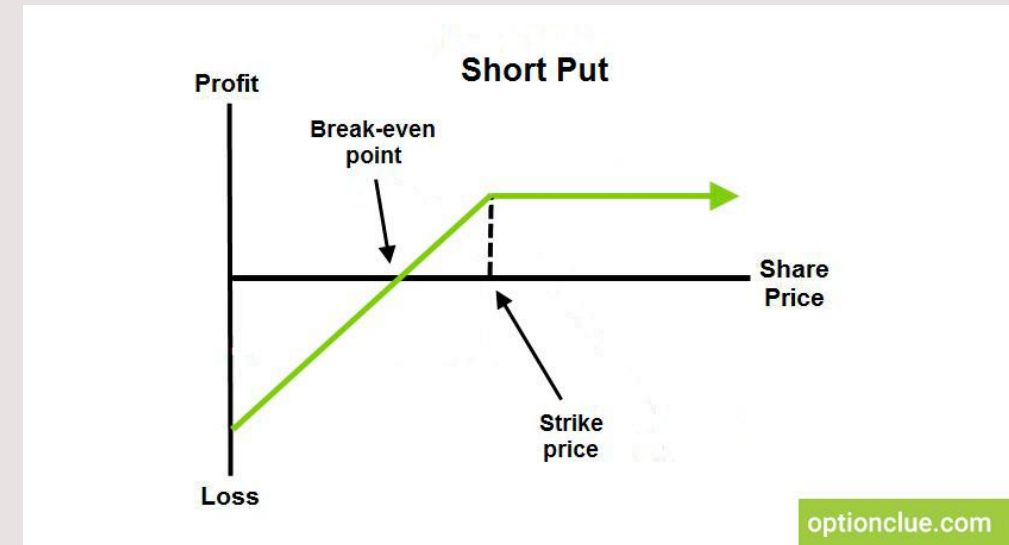
- **Directional Trading** – “I think this stock will go up”
- **Volatility trading (201)** – “I think this stock will be more volatile”
- **Combination of both (201)** – “I think this stock will be more volatile and will go up”

# Directional Option Trading

- Long Call – I think a stock will go up
- Long Put – I think a stock will go down
- Short Call - I think a stock is going down or staying the same
- Short Put – I think a stock is going up or staying the same

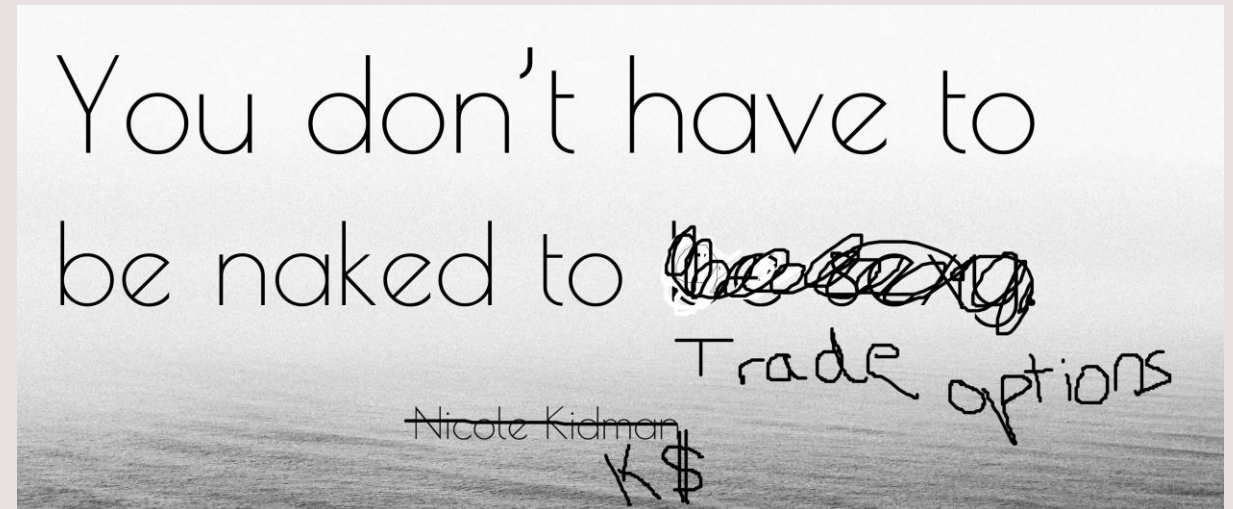
## Multi-Leg Options

- Short Straddle – Short call AND a Short put - I think a stock will stay the same
- Long Straddle – Long put AND Long Call -I think a stock will go up or down after news, not sure which direction
- Long Collar – Covered short call AND long put – I think it'll go up but I want an option premium to pay for some downside protection
- Reverse Butterfly – 4 option legs – wtf, seriously?



# Did I Scare You Yet?

- Exceptionally complex and jargony
- If you don't know the risks, you WILL lose everything.
  - Long calls in a nutshell – leverage play (big money potential), likely will expire worthless.
  - Short call in a nutshell – Likely will make money pretty regularly, **INFINITE RISK IF NAKED.**
  - Long Puts – Great portfolio insurance (VIX), more effective to not buy it since market generally goes up
  - Short Puts – Great way to collect money and buy stocks at discount, **must be able to buy 100 shares if ITM**
- Zero Sum investing





# Homework

- Let's track the SPY Sept 30<sup>th</sup> Long Call with a \$419 strike
- What happened to the option in the next week?
- Month?
- Did we make money?
- Did we lose money?