OPTIONS

1. Terminology

ZERO SUM GAME

|  |  |  |
| --- | --- | --- |
| Types | Buyer | Seller |
| Call option | Right to buy | Obligation to sell |
| Put option | Right to sell | Obligation to buy |

* (derive from) Underlying option ~ Stock
* Exercise/Strike Price ~E
* 100 shares per contract (organized, OTC)
* Expiration date
* Price of the option ~ Premium c/p 🡪 goes to sellers
* American(can be exercised anytime) vs European(only at maturity)

2.Option Strategies

Take a position in:

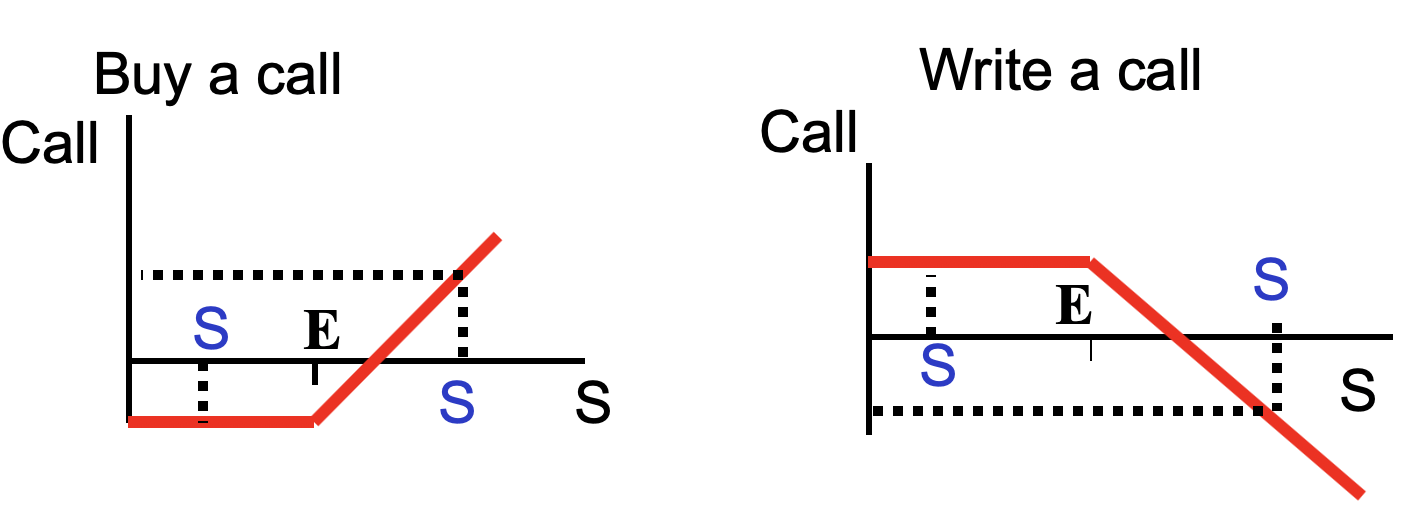
1. The option alone – *Naked Position*

2. The option and the underlying – *Non Combined*

3. Two or more options of the same type, known as a *spread*

4. A mixture of calls and puts, known as a *combination*

**A. Naked positions**



From call buyer’s view:

out of money (S<E)

at the money (S=E)

in the money (S>E)

**BEARISH**

-c-E+S

+c-S+E

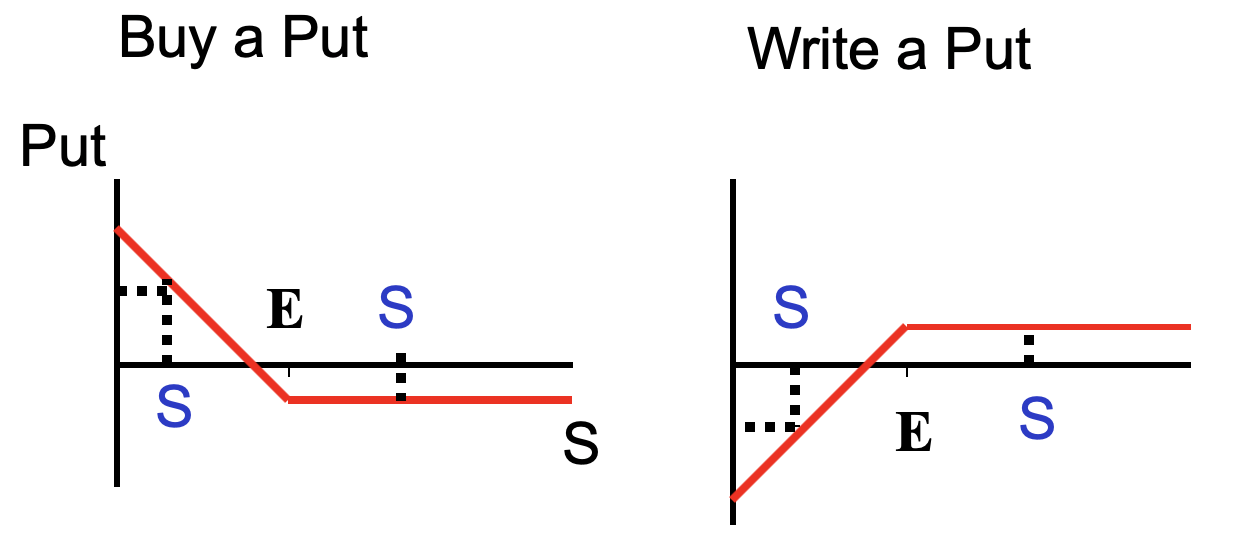
**BULLISH**

don’t

exercise

**BULLISH**

**BEARISH**



From put buyer’s view:

out of money (S>E)

at the money (S=E)

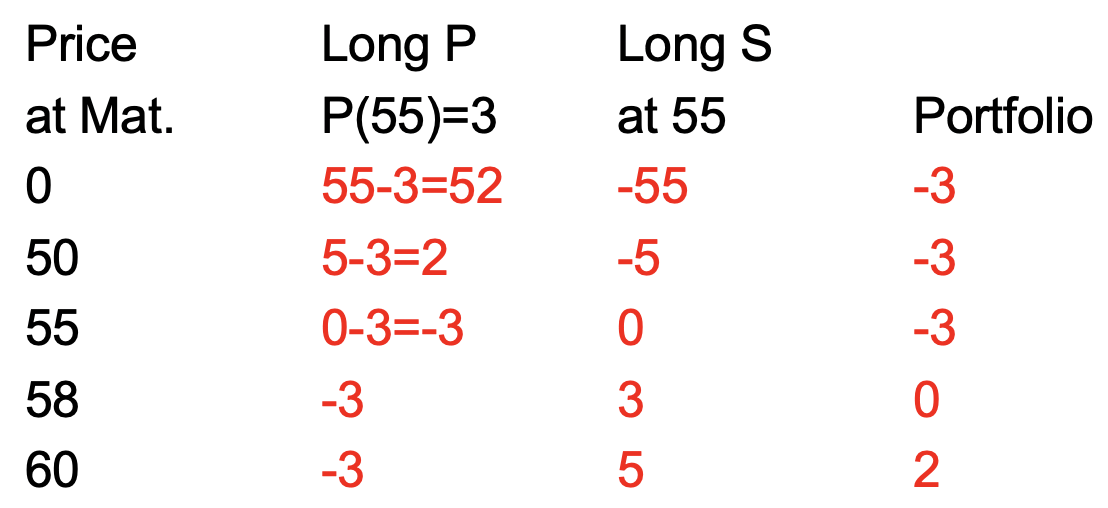
in the money (S<E)

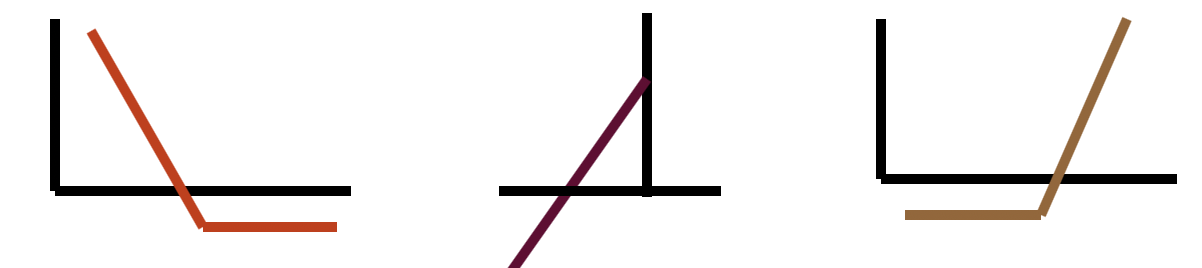
-p-S+E

+p-E+S

Profit is limited(Price cannot be zero)

**B. Long S & P : Protective Put (**stock managers)

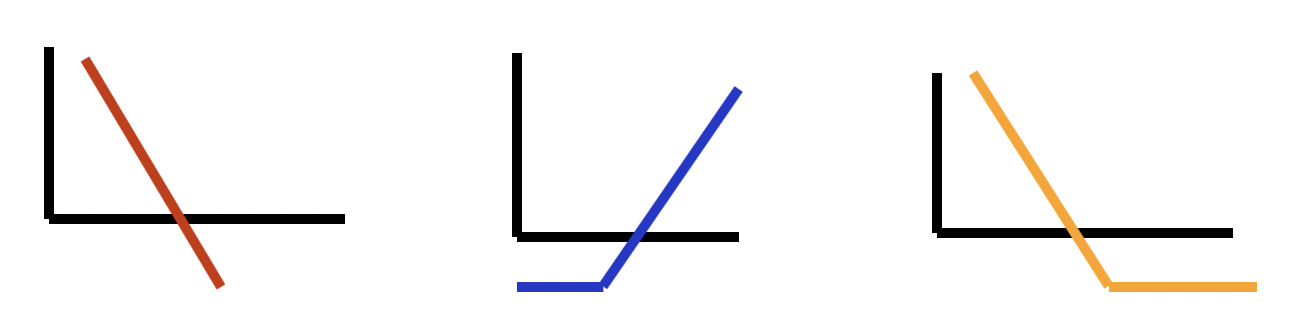
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synthetic call

**Case Shortsell S and buy C**

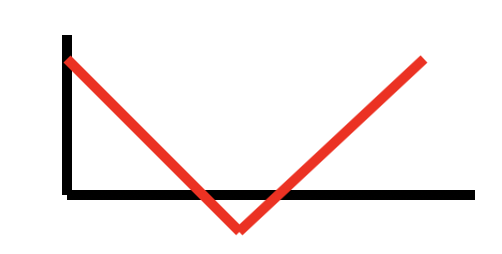
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synthetic put

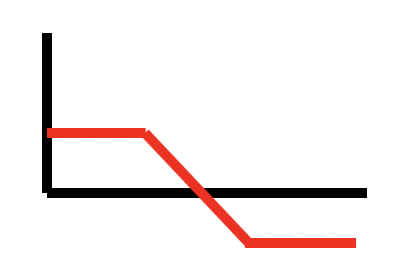
**C. Combination Strategy: Combine Put and Call on the same stock**

***Prediction: market is volatile***

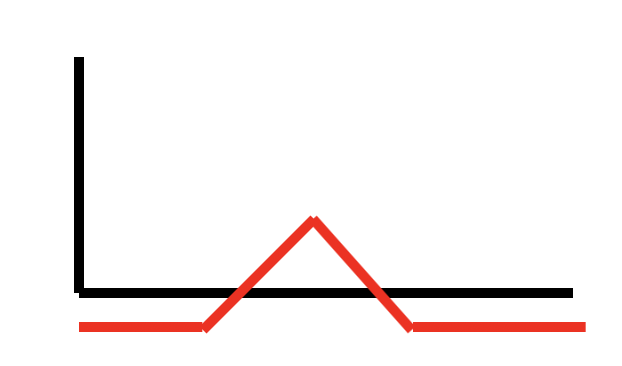
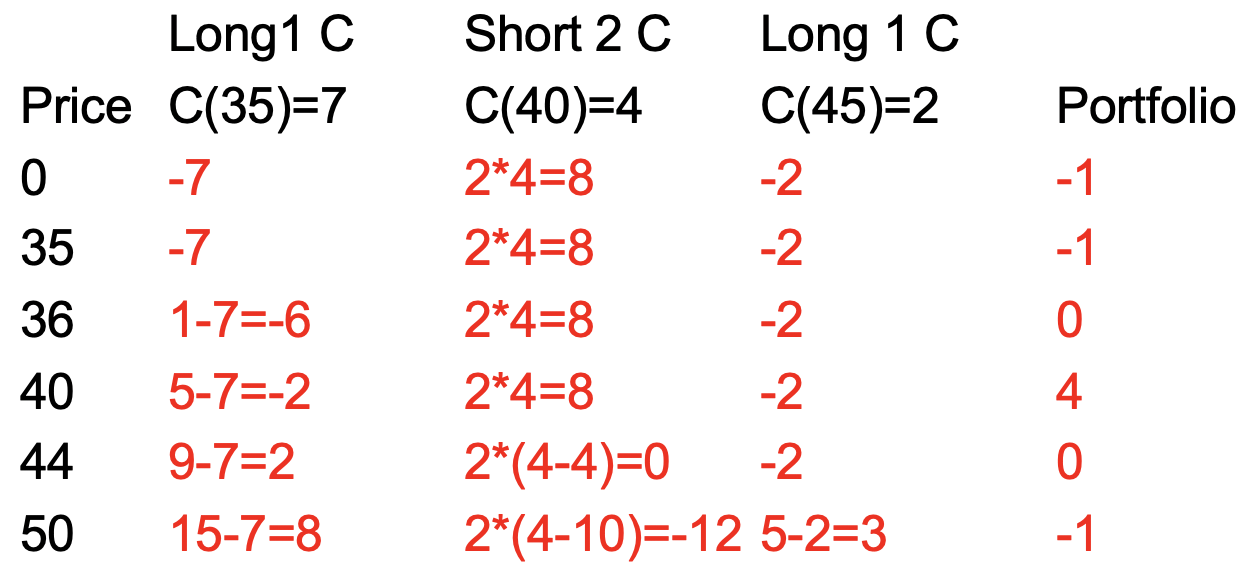
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**D. Spread buy Call that is financed by another Call on the same SK (zero-cost strategy)**

***Bearish Spread: Profit if price decreases***

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***Profit from small volatility***

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butterfly