

## Parity

**Parity** - When we discuss parity in terms of options, we say that parity is the amount by which an option is in the money. Parity refers to the option trading in unison with the stock. This also means that parity and intrinsic value are closely related. When we say that an option is trading at parity, we mean that the option's premium consists of only its intrinsic value.

For example, if Microsoft was trading at \$53.00 and the January 50 calls were trading at \$3.00, then the January 50 calls are said to be trading at parity. Under the same guidelines, the January 45 call would be trading at parity if they were trading at \$8.00. So, parity for the January 50 calls is \$3.00 while parity for the January 45 calls is \$8.00

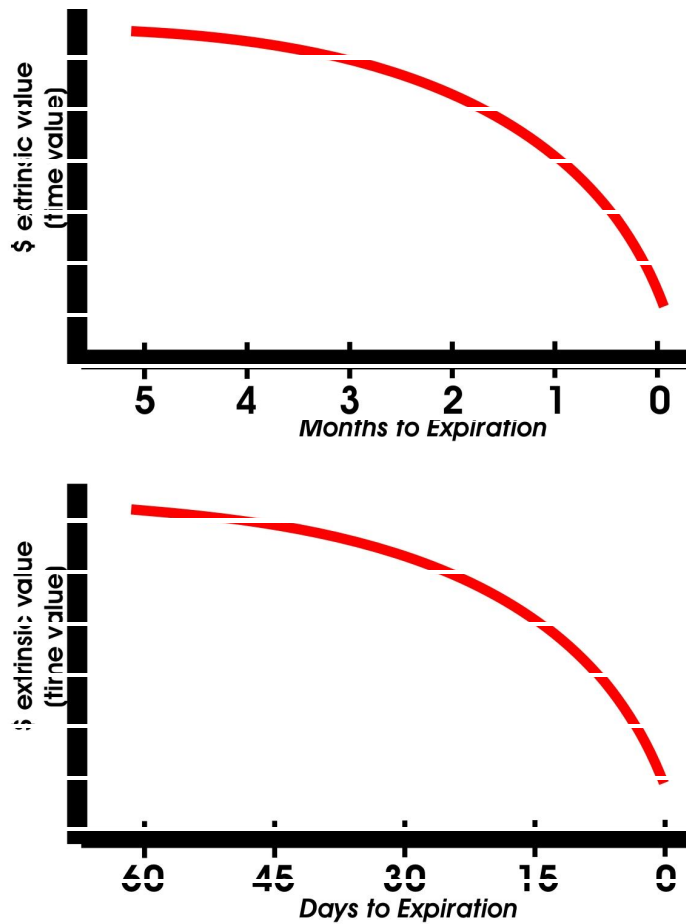
Now if these calls were trading for more than parity, the amount (in dollars) over parity is called 'premium over parity.' Thus, the term 'premium over parity' is synonymous with extrinsic value, which was discussed above.

If the stock is trading at \$53.00 and the January 50 calls are trading at \$3.50 then we would say that the calls are trading at \$0.50 over parity. The \$0.50 represents the premium over parity that is also the amount of extrinsic value. The \$3.00 is the amount of intrinsic value or parity.

The term **time decay** is defined as the rate by which an options extrinsic value decays over the life of the contract.

This concept can be illustrated by the charts below.

## Extrinsic Value Decay Chart



Volatility is defined as the degree to which the price of a stock or other underlying instrument tends to move or fluctuate over a period of time.

Implied Volatility is a value derived from the option's price. It indicated what the market's perception of the volatility of the stock or underlying will be during the future life of the contract.

A stock that has a wide trading range (moved around a lot) is said to have a high volatility. A stock that has a narrow trading range (does not move around much) is said to have a low volatility.

The importance of volatility is that it has the single biggest effect of the amount of extrinsic value in an option's price. When volatility goes up (increases), the extrinsic value of both the calls and the puts increase. This makes all the option prices more expensive. When volatility goes down



(decreases), the extrinsic value of both the calls and the puts decrease. This makes all of the option prices less expensive.

As stated earlier, a [call option](#) is a contract between two parties (a buyer and a seller) whereby the buyer acquires the right, but not the obligation, to purchase a specified stock or other underlying instrument, at a predetermined price on or prior to a specified date.

The seller of a call option assumes the obligation of delivering the stock or other underlying instrument to the buyer should the buyer wish to exercise his option.

The call is known as a long instrument, which means the buyer profits from the stock going up, and the seller hopes the stock goes down or remains the same. For the buyer to profit, the stock must move above the strike price plus the amount of money spent to purchase the option.

This point is known as the breakeven point and is calculated by adding the strike price of the call to its premium. While the buyer hopes the stock price exceeds this point, the seller hopes that the stock stays below the breakeven point.

The buyer of the call has limited risk and unlimited potential gain. His risk is limited only to the amount of money he spent in purchasing the call. His unlimited potential gain comes from the stock's upside growth potential.

The seller, on the other hand, has limited potential gain and unlimited potential loss. The seller can only gain what he was paid for the call. His unlimited risk comes from the stock price's ability to rise during the life of the contract.

The seller is responsible for delivering the stock to the buyer at the strike price regardless of the present market price of the stock. This is why the seller receives premium for the sale. It is compensation for taking on this risk.

For example, if a seller sold the MSFT January 65 call for \$2.00, he is giving the buyer the right to buy 100 shares (per contract) of MSFT from him for \$65.00 per share at any time until the option expires.

If MSFT rallies and trades up to \$75.00, the seller would realize a \$10.00 loss less the amount he received for the sale of the option (\$2.00). Meanwhile, the buyer would realize a \$10.00 profit less the amount he paid for the option (\$2.00).

If MSFT were to trade down to \$55.00, the seller would realize a \$2.00 profit (the amount of money he was paid from the buyer). Meanwhile, the buyer would only lose what he paid for the option (\$2.00).

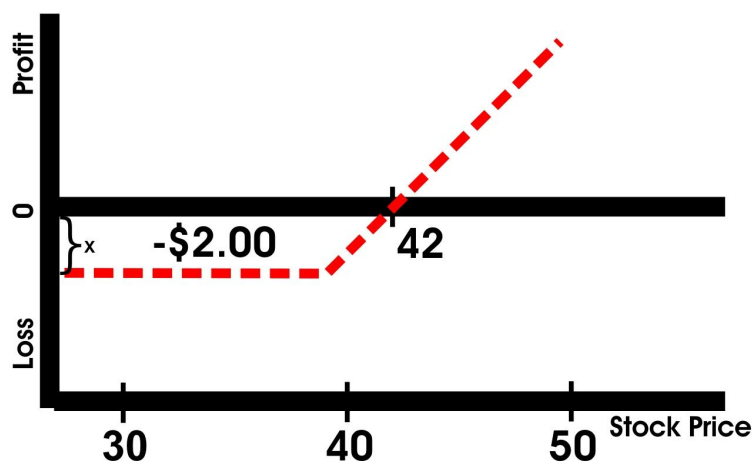
The following graphs are called parity graphs. They are intended to show you your option's profit and loss at expiration (when they are trading at parity: i.e. when they are trading without intrinsic value). The first graph shows a call purchase and the second shows a call sale. The graphs show the amount of your expenditure (in the case of a purchase) or the amount you have received (in the case of a sale) and the dollar price of the stock where you would breakeven.

In this example, we use the fictitious stock XYZ. Please make note of where the stock needs to be at expiration in order for you to be profitable, and how the premium paid (in the case of a purchase) or the premium received (in the case of a sale) affects your profitability.

Also notice the difference in the profit potential between a purchase of the option as opposed to a sale of the option. Lastly, it is important to note the unlimited potential risk inherent in the sale of an option, compared to the fixed risk of an option purchase.

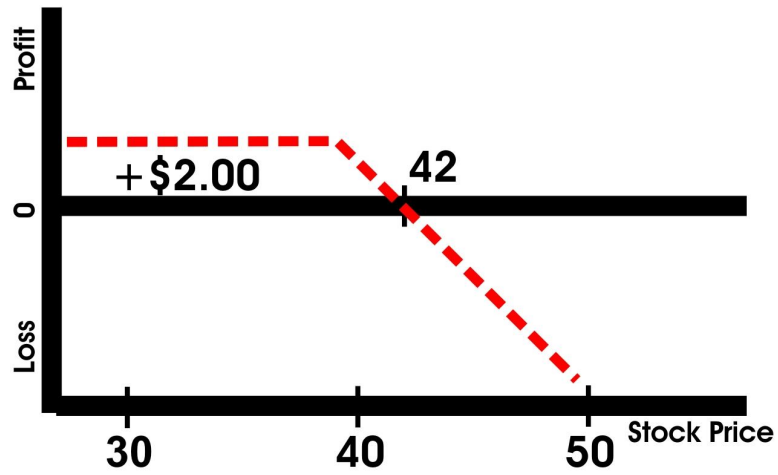
## PARITY GRAPHS

BUY 1 XYZ DEC 40 CALL FOR \$2.00



## PARITY GRAPHS

SELL 1 XYZ MAY 40 CALL FOR \$2.00



For more Information about option trading, please click here:

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