

## Contents

Before you attempt to price an equity option please read and understand the following discussion about each of the seven factors required of this pricing model: price of underlying stock, strike price, volatility, interest rate, dividend amount, ex-dividend date and days to expiration (or an expiration date).

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## How To Use Calculator

When the calculator first opens there are default values in place. To change input values, click on the first value you want to change. When it highlights you may change it, however notice that the output values disappear and the calculate button highlights in red. To change additional input values, move through the fields (boxes) with either the “Enter” key, the “Tab” key or an up or down arrow. (**Note:** you may also use your mouse to move through and change the input value fields, but you must press the Enter key to record each change.) When all changes have been made click on the Calculate button to recalculate and display new theoretical values reflecting the new input.

## **Stock Price**

Type in the price of the underlying stock which must be converted from 1/8ths or 1/16ths to decimal form. E.g.,  $37 \frac{3}{8}$  should be entered as 37.375;  $37 \frac{3}{16}$  can be entered as 37.1875. Acceptable range of values is 0 - 999.9999.

## **Strike Price**

Type in the strike (or exercise) price of the Call or Put you are attempting to value.  
Acceptable range of values is 0 - 999.9999.

## **Volatility**

Type in an estimate of the volatility of the underlying stock. For each class of option you are testing you can use the stock's calculated historical volatility (which can be found on CBOE's Web site - [www.cboe.com](http://www.cboe.com)), your own volatility estimation, or a value determined to be the option's implied volatility. This volatility number is a percentage. Enter only a number with up to 1 decimal place (e.g., '24' or '27.6'). The calculator will enter the percent sign. Acceptable range of values is 0 - 999.9.

## **Interest Rate**

Use a current “risk-free” interest rate appropriate for the lifetime of the equity option you are valuing. For example, for a one-month option, use a thirty-day rate; for a three-month option, use a ninety-day rate. Many investors use Treasury Bill rates. Enter only a number with up to 2 decimal places (e.g., ‘5’, ‘6.5’ or ‘6.25’). The calculator will provide the percent sign. Acceptable range of values is 0 - 99.99.

## Quarterly Dividend Payment

Type in the amount of the underlying stock's next quarterly cash dividend - i.e., the dividend amount that you would receive each payable date (in decimal form), not the total amount paid for the year. E.g., if the quarterly dividend is 25 cents, it should be entered as .25. If the stock does not pay a dividend, enter a zero or leave the input area blank. Acceptable range of values is 0 - 99.99.

## **1st Ex-Dividend Date**

Type in next ex-dividend date for the underlying stock in a mm/dd/yy format. The calculator will assume that each subsequent ex-dividend date during the lifetime of the option contract will occur at 3 calendar month intervals (quarterly). To obtain this date, as well as the quarterly dividend amount, we suggest you:

- 1) ask your broker.
- 2) check financial publications (e.g., "Wall Street Journal," "Investor's Business Daily," "Barrons'," , etc.).
- 3) inquire from the exchange where the stock is traded.

If the stock does not pay a dividend, enter zero's or leave the input area blank.



## **Days To Expiration**

Type in the days remaining until the option's expiration day. Include all calendar days (seven days to the week, including holidays), not just business days! Acceptable range of values is 0 - 9999. Alternatively, you can choose a preset month and year for your expiration. This calculator will know how many days until the expiration you have chosen.

