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Option Pricing

How is an Option Price Determined?

- Options are priced based on probabilities.
- These probabilities are calculated using different pricing formulas, the most well-known being the Black-Scholes pricing model.

Variables in Option Pricing

- Option pricing models consider the following variables:

    1. Price
    2. Strike
    3. Time
    4. Volatility
    5. Dividend
    6. Interest

Variables in Option Pricing

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1. **Price**
2. Strike
3. Time
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The simplest variable to understand is the price. As the price of the stock increases or decreases, the option price will change.

Variables in Option Pricing

- Option pricing models consider the following variables:

1. Price
2. **Strike**
3. Time
4. Volatility
5. Dividend
6. Interest

The strike price is the price at which option is exercisable.

Variables in Option Pricing

- Option pricing models consider the following variables:

1. Price
2. Strike
3. **Time**
4. Volatility
5. Dividend
6. Interest

The more time that there is on the option, the more expensive it will be.

Variables in Option Pricing

- Option pricing models consider the following variables:

1. Price
2. Strike
3. Time
4. **Volatility**
5. Dividend
6. Interest

The more volatile a stock is, the more expensive the premium will be to reflect the risk of sudden rapid price change.

Variables in Option Pricing

- Option pricing models consider the following variables:

1. Price
2. Strike
3. Time
4. Volatility
5. **Dividend**
6. Interest

All known dividends are discounted into the price to ensure accurate pricing.

Variables in Option Pricing

- Option pricing models consider the following variables:

1. Price
2. Strike
3. Time
4. Volatility
5. Dividend
6. **Interest**

The risk-free rate of interest is factored into the price of an option.

Variables in Option Pricing

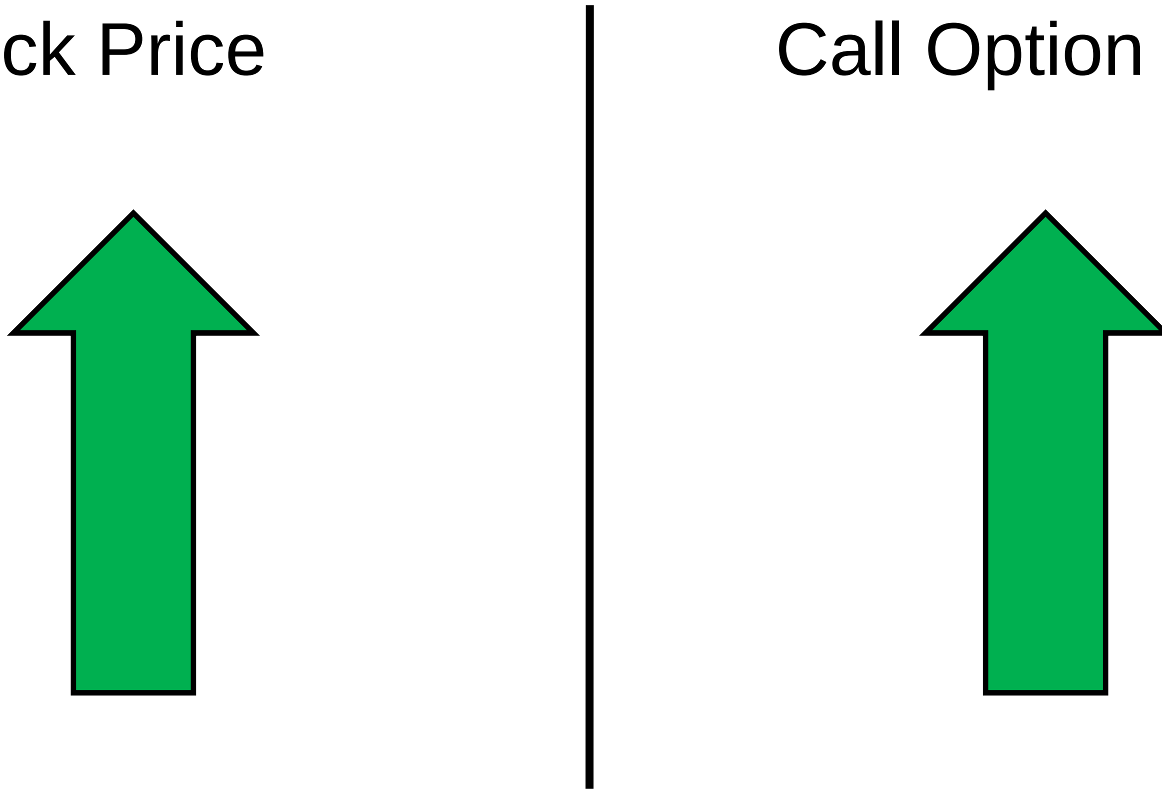
- Advanced options traders analyze the change in the pricing variables using the option “Greeks”.

- The beginning investor needs to understand just a few key correlations.

Call Options

How the stock price effects the option price?

Stock Price | Call Option Price



Call Options

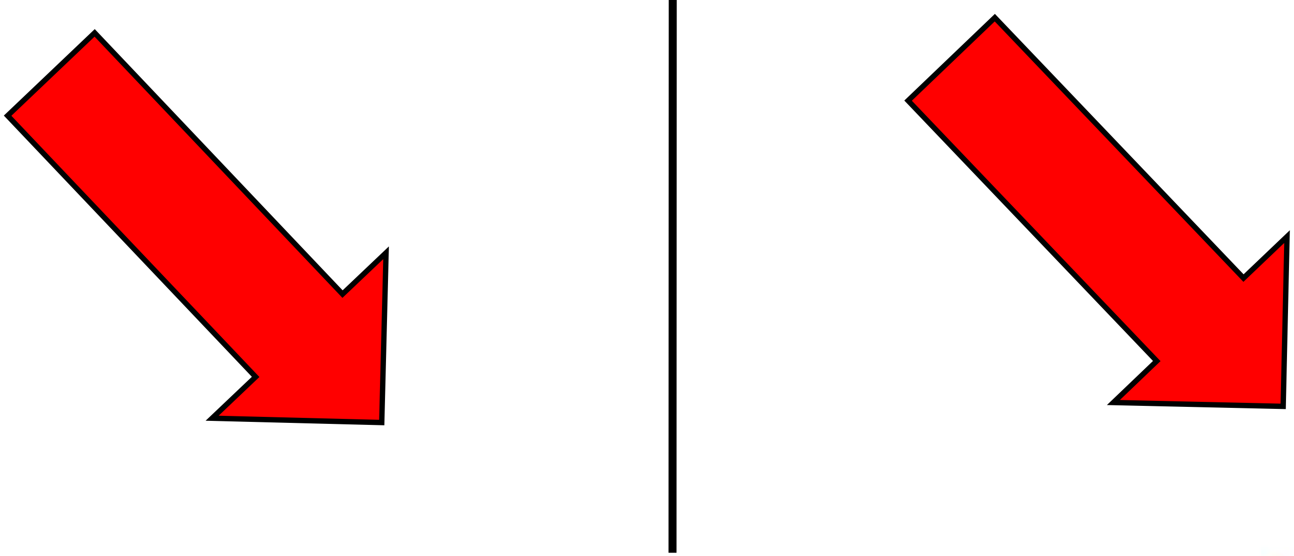
How the stock price effects the option price?

Stock Price	Call Option Price
↓	↓

Call Options

How does time decay effect the option price?

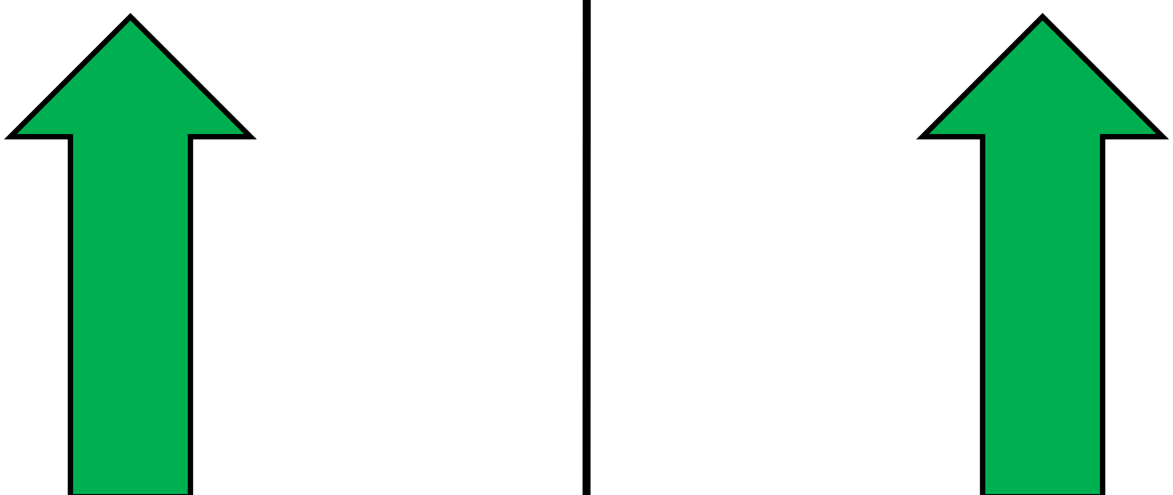
Time	Call Option Price



Call Options

How the volatility effects the option price?

Implied Volatility | Call Option Price



Call Options

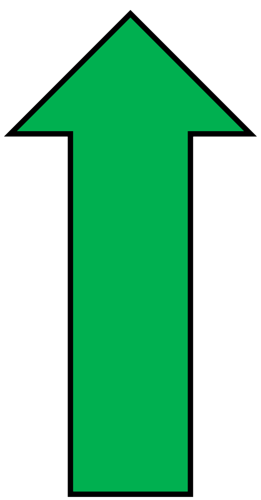
How the volatility effects the option price?

Implied Volatility	Call Option Price
↓	↓

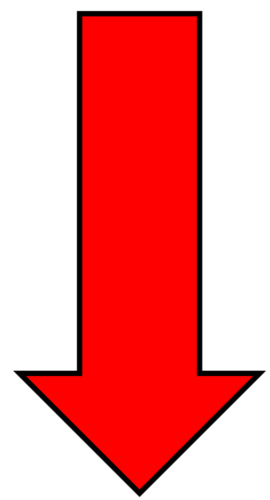
Put Options

How the stock price effects the option price?

Stock Price

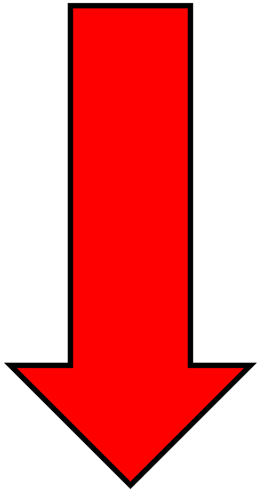
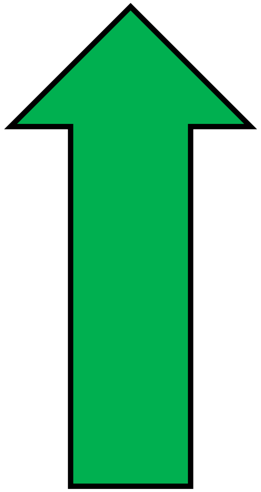


Put Option Price



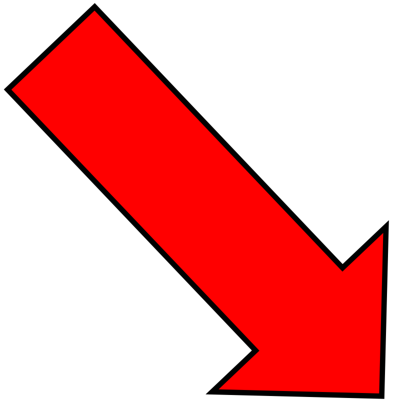
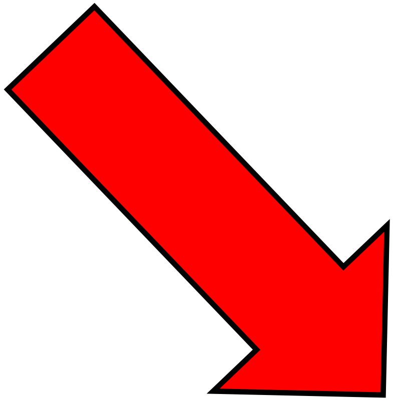
Put Options

How the stock price effects the option price?

Stock Price	Put Option Price
	

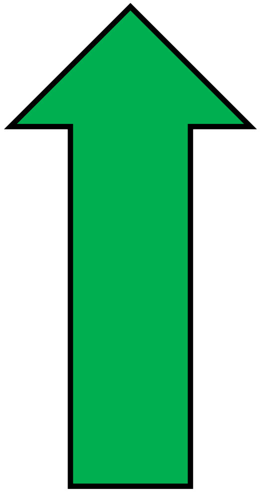
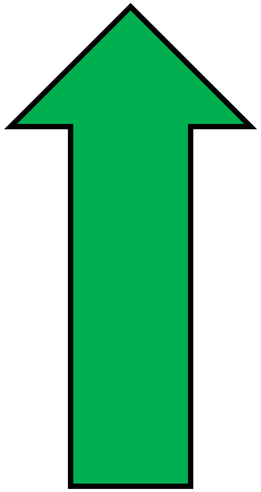
Put Options

How does time decay effect the option price?

Time	Put Option Price
	

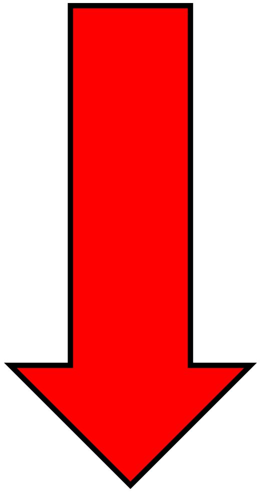
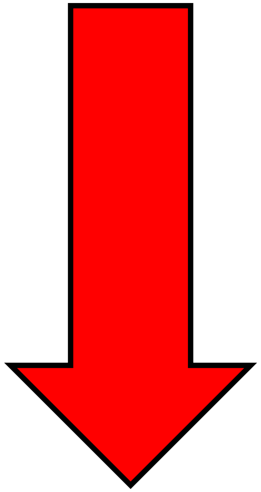
Put Options

How the volatility effects the option price?

Implied Volatility	Put Option Price
	

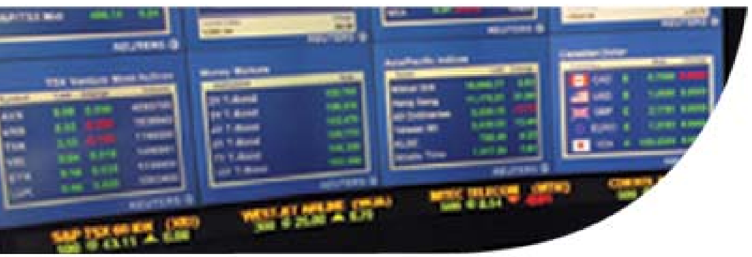
Put Options

How the volatility effects the option price?

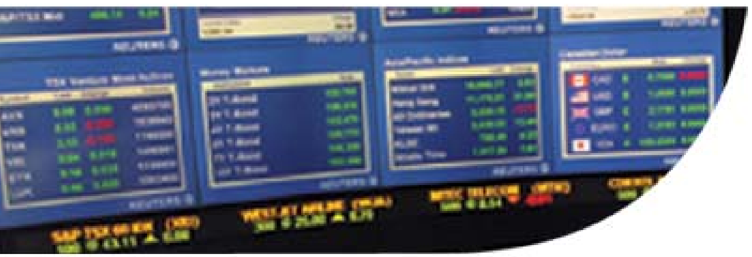
Implied Volatility	Put Option Price
	

Advanced Option Analysis

- Pro traders use the option “Greeks” to analyze these option pricing relationships.
- These are referred to as the delta, gamma, vega, theta, and rho.
- We will discuss these in further detail in the upcoming video.



Jason Ayres, President
Optionsource.net



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