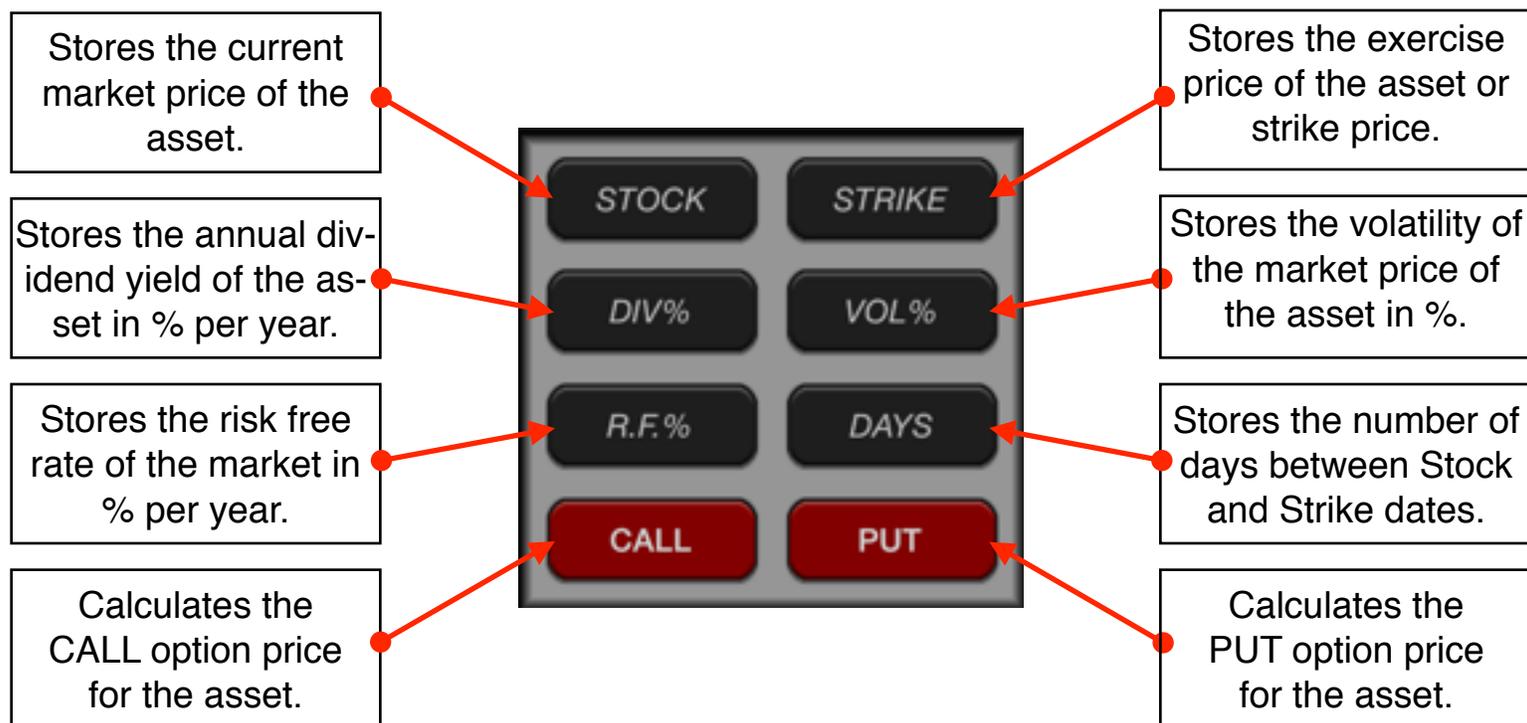


# Black-Scholes Option Valuation Model “Pro” Tool

This tool implements the widely used Black-Scholes option valuation model used to calculate the prices of **CALL** and **PUT** stock options. To show it, touch the **[OPT]** and select the “Black-Scholes OVM” option.



To perform the calculation, the values of “STOCK”, “STRIKE”, “DIV%”, “VOL%”, “R.F.%” and “DAYS” must be entered typing the value and touching in the corresponding button. Then, touching the “CALL” or “PUT” button, the tool will calculate the value and enters it into the calculator.

## **Example:**

Consider the European call and put options on a stock that has a current spot price of \$50 and a volatility of 25%. The option has a strike price of \$60 and matures in 180 days. The risk-free interest rate is 7%.

What are the values of the PUT and CALL options?

**Solution:** (touch the **OPT** key until any tool view is hidden and the calculator interface is fully visible).

Keystroke	Description
<b>[OPT]</b> & <b>[Black-Scholes OVM]</b>	Touch the [OPT] key to show the options selection view and select "Black-Scholes OVM".
Type "50" <b>[STOCK]</b>	Input the current market value of the underlying asset.
Type "60" <b>[STRIKE]</b>	Input the strike price on the option.
Type "25" <b>[VOL%]</b>	Input the stock annualized volatility.
Type "0" <b>[DIV%]</b>	Input the current annualized dividend yield of the asset.
Type "7" <b>[R.F.%]</b>	Input the risk free rate that corresponds to the option lifetime.
Type "180" <b>[DAYS]</b>	Input the number of days to expiration of the option.
<b>[CALL]</b>	Calculates the <b>call</b> option price. <b>Result = 1.05</b>
<b>[PUT]</b>	Calculates the <b>put</b> option price. <b>Result = 9.02</b>