

### 4.1.1.1. Long Call

Suppose LeanTree stock is currently trading at \$25. You believe LeanTree stock is about to skyrocket and, hence, you would like to buy a call option on it. Remember, a call option gives the buyer the right to buy at a set price. A call option may look like this:

LNTR Jul 25 call @ 3

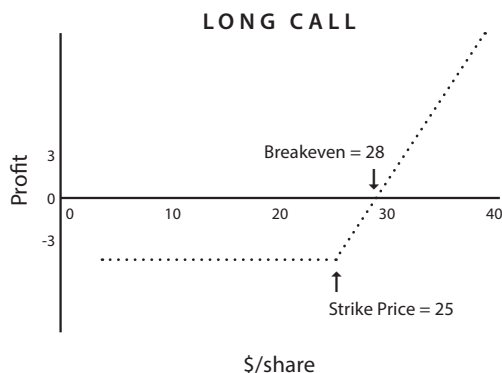
LNTR is LeanTree’s ticker symbol. July is the month the option will expire. The 25 refers to the strike price and “@ 3” means that the price of the option is \$3.00 per share.

The \$3 price of acquiring this option is the premium. You pay \$300 in total for the call option because an options contract always consists of 100 shares. You are now **long a call option**, meaning that you own a call option.

The price at which you have agreed to buy the security in the future is called the **strike price**, or **exercise price**. Whatever LeanTree stock might do over the next three months, whether it goes up or down, the price you have agreed to pay if you *exercise* your right to buy is fixed at \$25. The **expiration date** is the last day you can buy at that fixed price. The expiration day is always the third Friday of the month.

Take a look at the following diagram. If the price of the **underlying stock** (LeanTree) stays at \$25 or declines in value, you will not *exercise* your right to purchase the stock. You will let the option expire, worthless, and you will lose the \$3 premium you paid for each of your 100 shares (\$300). Why? Because you have bought the right to pay \$25 for the stock regardless of the market price of the stock. If you were to exercise the call at \$25 and acquire a security worth \$23, you would be paying more than the stock is worth.

Suppose, however, the price of LeanTree rises to \$28. You exercise the call and buy a security for \$25 that has a market value of \$28. What is your profit? Zero. The \$3 you make on the purchase exactly offsets the \$3 premium you paid for the right to buy. This is called the **breakeven point**. The breakeven point is the sum of the strike price and the premium:  $\$25 + \$3 = \$28$ . This is the point where you will recover all of your investment and, hence, breakeven.



If the expiration date arrives and the price has still not risen above your breakeven, but the market price is above the strike price, you will still exercise your call rights because by exercising the call option, you will at least recover some of the money you paid out as a premium.

If LeanTree rises to \$32 and you exercise your call, you will be able to buy the shares at \$25 and sell them in the market at \$32. You will realize a gain of \$4 per share on your investment ( $\$7 - \$3$ ), a profit of \$400. A nice return on a \$300 investment. The beauty of a long call is that your losses can never exceed the premium you paid for the option, even if LeanTree goes bankrupt. In contrast, your profits, in theory, are without limit. Profits will continue to rise with the price of the stock, for as high as the stock will go.

**📌 Memory Aid:** When you believe that a stock is going to go UP, buy a call. Remember the phrase "CALL UP."

### DEFINITIONS

**Options contract:** a contract that allows the holder to buy or sell 100 shares of an underlying security at a given price by a given date

**Underlying security:** the security that must be delivered when an options contract is exercised

**Expiration date:** the last day an options contract may be freely exercised before it becomes void. The last day is always the third Friday of the month

**Exercise or strike price:** the price at which an options holder may buy or sell an underlying security

**Premium:** the price paid to an option writer for the right to exercise the option before it expires

**Breakeven point:** the market price of an underlying stock at which the investor neither makes nor loses money

**In the money:** an option is "in the money" if the contract has value if it is sold. A call option is in the money if the strike price is below the market price, allowing the holder of the call option to purchase underlying asset for less than the market price. Likewise, a put option is in the money if the strike price is above the current market price, allowing the holder of the put option to sell an asset at a strike price for more than the market price.

GOOD TO KNOW!

### 4.1.1.2. Short Call

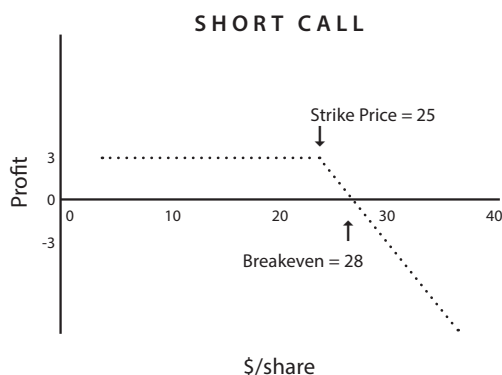
Every option has both a buyer and a seller. The seller of the option is called the **option writer**. Imagine that you now believe that LeanTree stock will not rise, and you are willing to bet on it. You decide to write the following call option:

Short LNTR Jul 25 call @ 3

This is also known as a **short call**. In writing the call option, you receive the \$3 premium that an option buyer has paid. A writer of an option, whether a put or a call,



will always receive a premium from the buyer. The premium is your profit if the price of the underlying security goes down or stays the same; the premium helps to compensate you for the risk you are taking by writing the option. If the price of LeanTree drops or stays the same, you get to keep the \$300 ( $\$3 \times 100$  shares). If the price of the underlying stock increases unexpectedly, your breakeven point is \$28, which is the point at which you neither gain nor lose money. With a short call, this is equal to the strike price plus the premium. At \$28 per share, you take a \$3 per share loss, which exactly offsets the \$3 premium you received.



### SAMPLE QUESTION

**Martin goes long a Colonial Camping Supplies call option on stock that is currently selling at \$17.50/share. The option is CLCS Apr 15 call @ 4. What is Martin's breakeven point?**

- A. \$21.50
- B. \$19
- C. \$16.50
- D. \$13.50

**Answer: B.** To find the breakeven point for a call option, whether the buy side or the sell side, you add the premium to the strike price, which in this case is \$15. The breakeven point is, therefore, \$19 for both the holder and the writer.