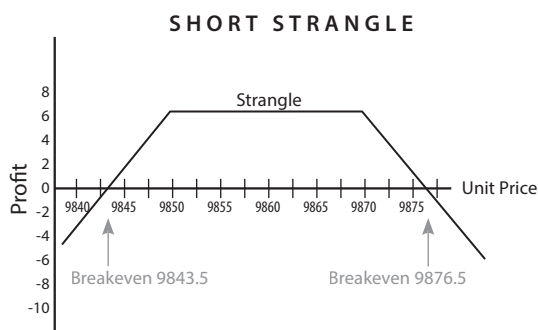Suppose you write a call at a strike price of 9,870 for a premium of 3 basis points, and you write a 9,850 put for 3.5 points. The market price is 9,860. The strangle will look like the illustration below. The combined premiums total 6.5. The breakeven points are 9,843.5 for the put and 9,876.5 for the call.

SHORT STRANGLE

The underlying will have to move 16.5 basis points in either direction to eliminate the $162.50 profit you make by collecting the combined premiums (16.5 bp x $25). If the volatility of the Eurodollar is such that it deviates by more than 16.5 in either direction, you will begin to take a loss, and the more it moves from either of the strike prices, the greater the loss.

The investor who wants to bet that the volatility of Eurodollars will be high may buy a long strangle, and it has the mirror image of this illustration. Volatility that moves prices beyond the 9,850 or 9,870 strikes will put the holder in the money, and if prices bust through the breakeven points, the holder will begin to see a profit.

5.3. **HEDGING WITH SPREADS**

If straddles and strangles are called **combinations** because they combine the use of calls and puts, **spreads** are the use of two or more options of the same type, either a long and short call or a long and short put.

A **call spread** is the purchase and sale of call options at a different strike price. If you buy a call with a *lower* strike price than the strike price of the call you write, it is called a **long call spread**, or a **bull call spread**. Remember that for call spreads, you are bullish if you are long the lower strike price. If the call you write has the lower strike price, it is called a **short call spread**, or alternatively, a **bear call spread**.

A **put spread** is the purchase and sale of put options at a different strike price. If the put you buy has a *higher* strike price than the put you write, it is called a **long put spread** or a **bear put spread**. With a **short put spread** or **bull put spread**, the put you buy will have the lower strike price, and you will profit by a rise in price that puts your position in the money.

For spreads, whenever the option purchased has a higher premium than the option sold, the investor's spread account will have a net debit, and the spread will be called a

debit spread. This is called a debit spread because the investor is spending more money than he receives, meaning that the premium he pays is higher than the premium he takes in. For debit spreads, the investor's maximum loss is the net amount of money that the investor has paid in premiums.

In contrast, a **credit spread** is a spread where the written option has the higher premium. This is called a credit spread because the investor is taking in more money than he is putting out, meaning that the premium the investor received was greater than the premium the investor paid. For credit spreads, the maximum gain is always the net amount of money that the investor receives in premiums.

A long call spread has the general characteristics of a long call. A short put spread has the characteristics of a short put. A spread simply applies a ceiling on both profits and losses.

5.3.1. DEBIT CALL SPREAD

Suppose you open positions on the following options:

<div align="center">

Long Sep Gold 1245 call @ 16

Short Sep Gold 1255 call @ 11

</div>

You have purchased the more expensive option of the two, so you have put out more money than you have taken in. This is a **debit spread**. This particular spread is a **debit call spread** because the two options are both calls. It is also called a **bull debit spread** because, as we will see, the spread turns a profit as the price of the underlying product rises.

The maximum loss for the holder of a debit call spread occurs when gold is trading at or below the lower strike price. In our example, if gold is trading below $1,245 at expiration, both options will expire, and your total losses will be fixed at the $5 difference between the two premiums. You can never lose more than the premium you pay for a debit call spread.

For a debit call spread, you calculate the breakeven by adding the premium you paid to the lower strike price. In this case, you will breakeven at $1,250 ($1,245 + 5).

If gold rises to $1,255, you have hit your maximum gain at $5. Why? Let's look at the numbers when the price of gold has climbed to $1,260. The long call is in the money by $15 ($1,260 – $1,245 strike). The short call is now out of the money by $5 ($1,260 – $1,255 strike). You will take in $15 but have to pay $5. This difference is $10. You then subtract the $5 premium from the $10 for a maximum gain of $5. A quicker way to calculate this is to remember that your maximum gain is the difference in the two strike prices minus the difference in the premiums: (($1,255 – $1,245) – ($16 – $11)) = $10 – $5 = $5.

Investors purchase a bull call spread if they expect prices to rise but want to reduce the cost of a long call. With a bull call spread, an investor chooses to cap his upside potential, to reduce his premium.
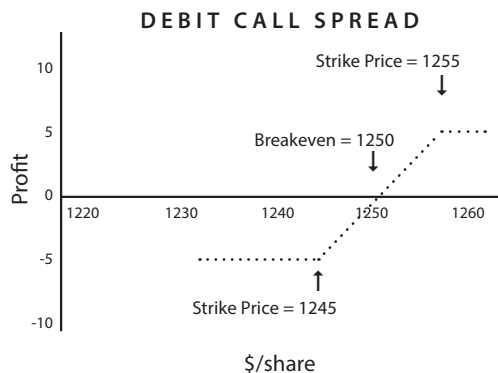
DEBIT CALL SPREAD

Max Gain: Difference in strike prices – difference in premiums; occurs at upper strike price and above

Max Loss: Difference in premiums; occurs at lower strike price and below

Breakeven: Lower strike price + difference in premium

The maximum gain occurs when the market price equals or exceeds the upper strike price. Its amount is the difference in strike prices minus the difference in premiums. The maximum loss occurs when the market price drops at or below the lower strike price and equals the difference in premiums. The breakeven price equals the sum of the lower strike price and the difference in premiums.

SAMPLE QUESTION 1

Isabel likes cotton #2 futures at its current price of 71 cents. She buys a call just out of the money with a strike of 73 at 4.85, and she writes a call at a strike of 75 at 4.07. The position she has created is called a:

A. Long strangle
B. Bull call spread
C. Bear call spread
D. Credit spread

Answer: B. Isabel has written and bought two options of the same type, which makes her position a spread, a call spread to be more exact. With calls, we know that as the strike price increases, the premium decreases. Since the call she bought has the lower strike price, this is a bull call spread. She expects to profit by a rising cotton price. Since the call she bought has the higher premium, she has bought a debit spread.

SAMPLE QUESTION 2

Gabrielle likes coffee futures at its current price of 138.00. She buys a call with a strike of 140 at 7.20 and she writes a call at a strike of 145 at 5.50. The contract size for a coffee contract is 37,500 pounds, and it is priced in cents per pound. What is Gabrielle's maximum loss, maximum gain, and breakeven?

A. Maximum loss = $637.50, Maximum gain = Unlimited, Breakeven = $143.30
B. Maximum loss = $1,237.50, Maximum gain = $637.50, Breakeven = $139.70
C. Maximum loss = $637.50, Maximum gain = $1,237.50, Breakeven = $141.70
D. Maximum loss = Unlimited, Maximum gain = $637.50, Breakeven = $139.70

Answer: C. Gabrielle has written and bought two options of the same type, which makes her position a spread, a debit call spread to be more exact. Her maximum loss is the net amount she put out, which is the difference in the premiums (1.7 cents per lb. x 37,500 = $637.50). Isabel's maximum gain is the difference in the strike prices minus the difference in the premiums (5 – 1.7) times the contract size (3.3 cents x 37,500), or $1,237.50. Her breakeven price is the difference in the premiums plus the lower strike price: 1.7 + 140 = 141.70.

5.3.2. CREDIT CALL SPREAD

If you want to take in income and do not expect much volatility in the underlying futures contract, but you want to cap your risk, you can create a credit call spread. Here is an example:

<div align="center">

Short Sep Gold 1245 call @ 16

Long Sep Gold 1255 call @ 11

</div>

In this case, the spread writer expects the price to decline or go nowhere. An investor who opens this position is bearish, which is why it is sometimes called a bear credit spread. In the example above, the spread writer takes in a total of $5 ($16 – $11), which is why it is called a credit spread—it creates a credit in the investor's account. An investor in this credit call spread has the same breakeven as the debit call spread we described above: the difference between the premiums added to the lower strike price (1,245 + 5 = 1,250). The maximum gain is the difference in premiums ($5 x 100 troy ounces = $500). The maximum loss occurs when the security's rising market price reaches and exceeds the higher strike price. The maximum loss is always the difference in the strike prices minus the difference in the premiums ((1,255 – 1,245) – (16 – 11)) x 100 troy ounces = $500).

CREDIT CALL SPREAD
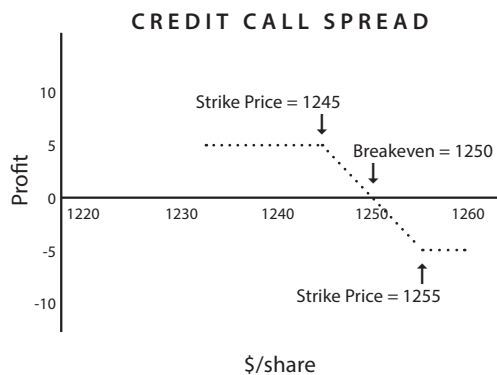
Max Gain: Difference in premiums; occurs at lower strike price and below

Max Loss: Difference in strike prices – difference in premiums; occurs at upper strike price and above

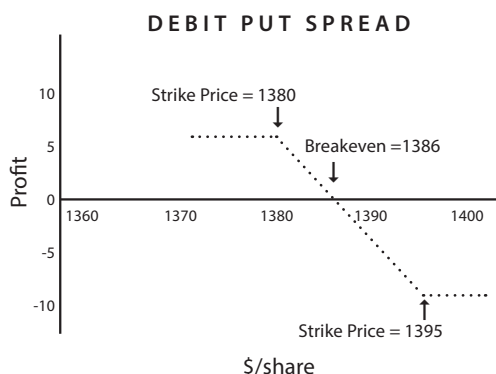**Breakeven:** Lower strike price + difference in premiums

5.3.3. DEBIT PUT SPREAD

With a **debit put spread**, also called a **bear put spread**, or a **long put spread**, you buy a long put with a higher strike price and a short put with a lower strike price. You do this, because you expect the underlying to drop, but not significantly. Consider the following spread:

Long July Russell 2000 1395 Put @ 42
Short July Russell 2000 1380 Put @ 33

This is a debit spread because you have spent more in premiums to acquire the position (42 index points) than you received (33). The premium you pay totals $450 (9 index points x $50 multiplier). This is your maximum loss. Your maximum gain occurs when the index drops to 1,380. At this point, your net gain is $300. This is calculated by taking the difference in the strike prices (15) minus the difference in the premiums (9) and applying the multiplier. Your breakeven point is the upper strike price minus the difference in the premiums, or 1,386 (1,395 – 9).

DEBIT PUT SPREAD

Max Gain: Difference in strike prices – difference in premiums

Max Loss: Difference in premiums

Breakeven: Higher strike price – difference in premiums

5.3.4. CREDIT PUT SPREAD

With a **credit put spread**, the put you write will have a more expensive premium than the put you buy, because the long put is farther out of the money. A credit put spread is also called a **short put spread**, or a **bull put spread**.

Short July Russell 2000 1395 Put @ 42
Long July Russell 2000 1380 Put @ 33

Suppose the Russell 2000 is trading at 1,386. You write a put with a 1,395 strike price and collect a premium of 42. To hedge against an unexpected drop in the price of the underlying, you buy a 1,380 put at 33. Since you have taken in more than you paid (a net of 9 points, or $450), your put spread is a credit spread. This $450 is your maximum gain, regardless of whether the Russell 2000 holds steady or rises in price. If the price falls, however, your losses will be capped at $300 (the 15-point difference in strike prices minus the 9-point difference in premiums times 50, which is the multiplier for the Russell 2000). Once the strike price for the long put is reached, any additional losses from the short put due to a further drop in price of the underlying will be exactly offset by the gains reaped from the long put. Your breakeven is the difference in the premiums subtracted from the higher strike price. In this case, 1,395 – 9 = 1,386.

A short put spread works for the more cautious investor, who is unwilling to risk his house and car in order to maximize his profits.
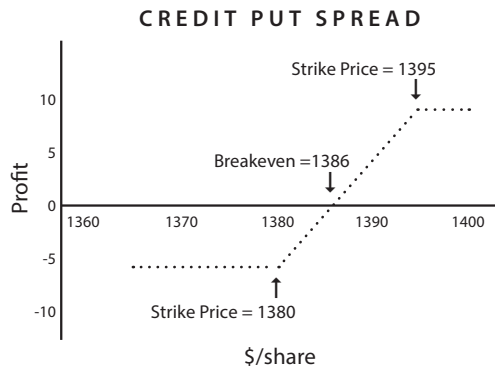
CREDIT PUT SPREAD

Max Gain: Difference in premiums

Max Loss: Difference in strike prices – difference in premiums

Breakeven: Higher strike price – difference in premiums

> **Note:** The easiest way to determine whether a spread is bullish or bearish is to look at the long position. If the strike price of the long position is the lower strike price, it is a bullish position. Remember that the word BULL has two Ls, for Long the Lower strike price. In contrast, if the long position has a higher strike price, it is a bearish spread.

SUMMARY

Type of Spread	Market Expectation	Initial Outlay	Long Call or Put Has:	
			Strike	Premium
Debit call	Bullish	Debit	Lower	Higher
Credit call	Bearish	Credit	Higher	Lower
Debit put	Bearish	Debit	Higher	Higher
Credit put	Bullish	Credit	Lower	Lower

EXERCISE

MATCH THE SPREAD TYPE TO THE INVESTMENT:

A. Debit call spread
B. Debit put spread
C. Credit call spread
D. Credit put spread

1. _____ **Long January Gold 1260 Put @ 340; short January Gold 1275 Put @ 354**

2. _____ **Long March Random Lumber 416 Call @ 48; short March Random Lumber 425 Call @ 38**

3. _____ **Long July Oats 271'6 Call @ 55'2; short July Oats 262'4 Call @ 63'6**

4. _____ **Long December Russell 2000 1550 Put @ 60; short December Russell 2000 Put 1250 @ 37**

Answers: 1. D; 2. A; 3. C; 4. B

5.3.5. VERTICAL VS. HORIZONTAL SPREADS

The spreads we have been discussing so far are known as vertical spreads. **Vertical spreads** are spreads involving two puts or two calls, each having different strike prices but the same expiration date. They will make or lose money based on the price movement of the underlying instrument above or below the strike price. For this reason, vertical spreads are also known as price spreads, money spreads, and strike spreads.

Another type of spread involves two puts or two calls that have an identical strike price but different expiration dates. For instance, an investor may go long a call that is nine months out and go short a call that is three months out (nearer expiration). These are variously called **horizontal spreads**, **time spreads**, or **calendar spreads**. Horizontal spreads make money based on the changing value of their premiums as they move across time toward their expiration date. Since horizontal spreads have the same strike price, the difference between the price of the underlying product and the strike will always be the same on both sides of the spread. As a result, the two premiums will always have the same intrinsic value. The profitability of this type of spread is determined entirely by the different time values of the options' premiums.

CALENDAR SPREAD EXAMPLE

Type of Cal-endar Spread	Example		Cost of Spread: Difference in Premiums
Debit spread	Short 530'0 June Corn Call @ '6	Long 530'0 Aug Corn Call @ '10	• Receive nearby price • Pay deferred price • 6'0 – 10'0 = -4'0
Credit spread	Long 530'0 June Corn Call @ '6	Short 530'0 Aug Corn Call @ '10	• Receive deferred price • Pay nearby price • 10'0 – 6'0 = 4'0

5.3.5.1. Calendar Spreads and Time Value

The first thing to understand about calendar spreads is that the longer-term option (the deferred option) generally has more time value than the shorter-term option (the nearby option). This should be obvious enough, since the cash price of the underlying product will have more time to rise or fall prior to the time the deferred option expires. As a result, the deferred option can be expected to have the higher premium.

For any option, whether nearby or deferred, the time value of its premium is always greatest when an option is at the money. At this point, any price movement of the underlying cash commodity will tip the option either in or out of the money. When the underlying price veers sharply from the strike price in either direction, time value will decline.

In addition, time value declines faster for a nearby option than a deferred option because the price of the underlying has less time to move off the current market price. Since the time decay for the nearby option is greater than for the deferred option, the premiums of the spread have a tendency to widen as the spread moves toward its first expiration date.

Example: Consider the following at the money calendar spread.

Short XYZ Mar 40 Call @ 2 (nearby option)
Long XYZ Sep 40 Call @ 5 (deferred option)

Let's first explore the best case scenario for the calendar debit spread. The price of XYZ stays at 40 until the time that the nearby option expires. The option expires worthless and the investor is now left with the opportunity to profit from the remaining long call. The investor has received a premium from the short position, which helps to mitigate the cost of the long call. In essence, the investor is able to purchase a call for 3 instead of 5.

What if the price moves up past 40 before the nearby call expires? Suppose that the market price of the underlying rises to $42. Both premiums now have an intrinsic value of $2, and the time value of both has decayed, with the nearby option decaying faster. Let's pretend the premium of the short call is now $3 and the premium of the long call is $6.50. The spread has widened from $3 to $3.50. When the investor closes out his position, he will now receive $3.50, netting $0.50.

The time value of the deferred option is also more sensitive than the nearby to changes in implied volatility. If price volatility represents the size and frequency of the underlying product's recent price changes, **implied volatility** is the price volatility that the market expects to see in the near future. An increase of implied volatility will have greater impact on the deferred-month option, not only because the premium itself is higher, but also because the greater volatility has more time to work.

Example: The holder of a calendar spread receives $1 for a short option in the nearby month and pays $4 for the long option in the deferred month. Implied volatility of the underlying suddenly increases by 1%, causing the near-term premium to increase by 20% and the deferred month's premium to increase by 25%. Assuming the market price of the underlying has remained the same, the short option is now worth $1.20 and the long option $5.00. The spread, which had been $3, has now widened to $3.80, netting a profit for the investor.

CALENDAR SPREADS

Type of Spread	Deferred-Month Premium Is:	Trader Expects and Wants:	Relationship of Deferred Month Premium to Nearby		
			Time Value	Rate of Decay	Price Sensitivity
Long	A debit	Widening spread	Greater	Slower	Greater
Short	A credit	Narrowing spread			

> 🖈 **Note:** To remember the best scenario for a calendar spread investor, remember that the words "credit" and "narrow" both have six letters. The words "widen" and "debit" both have five letters in them.

5.3.5.2. Calendar Spread Mechanics

When a trader sells the nearby and buys the deferred month hoping that the spread will widen, he has bought a long calendar spread. It is called a **long calendar spread** because when you initiate the spread, you pay more for the distant option than you receive for the nearby option. The table below illustrates an at the money September-June call calendar spread, bought in March at a $50 strike price and offset in May at the same strike price. Note that the premium for the June call is lower than the September call in both months and that its rate of decline is greater. The spread has widened from negative five to negative eight. Since the call is at the money, the premium is all time value.

Calendar Spread	March	May	Gain/Loss
Jun 50 Call: premium	Sell at $10	Buy at $2	$8
Sep 50 Call: premium	Buy at $15	Sell at $10	-$5
Spread	-$5	-$8	$3

The picture gets more complicated when the price of the underlying goes in or out of the money. Suppose that the market price rises to $75. Both $50 calls are so far in the money that their premiums have no time value at all, only intrinsic value. Since both contracts have the same strike price, their intrinsic values are the same. Now the table looks more like the following. Note that the spread has narrowed to zero. Time value is greatest for at the money options and declines as prices diverge in either direction. If the price of the underlying goes well out of the money, time value for both options will fall to zero, and the loss on the calendar spread will be exactly the same.

Calendar Spread	March	May	Gain/Loss
Jun 50 Call: premium	Sell at $10	Buy at $25	-$15
Sep 50 Call: premium	Buy at $15	Sell at $25	$10
Spread	-$5	$0	-$5

This leads to another conclusion about long put or call calendar spreads. If both legs of the spread are offset at the same time, the maximum loss that one can sustain is the amount of the spread at the initiation of the contract. The maximum gain occurs when the spread expires at the money. This suggests that a long calendar spread is most productive when the price of the underlying product is stable (its price volatility is low) and implied volatility is expected to stay the same or drop. The opposite is true of short calendar spreads.

Of course, an investor can only hold both sides of the position until the nearby option expires. If one chooses to keep the more distant option, the call calendar spread now converts to a long call. This position offers the possibility of unlimited profits at no additional cost. A call calendar spread used in this way is taking a bullish position. A put calendar spread that rides the long position is taking a bearish position. When both legs of a long calendar spread are offset at the same time, this is known as a **neutral calendar spread**.

A neutral calendar spread has limited profit potential. When a long calendar spread is either bullish or bearish, its potential profit is unlimited.

A long call calendar spread is purchased when the cash price of the underlying commodity is expected to be steady or slightly rising before the expiration of the nearby option and its price beyond that time is expected to increase more sharply. A long put calendar spread is acquired when the commodity's price is expected to be steady or drop slightly during the life of the nearby option and to drop more sharply in the months beyond.

5.3.5.3. **Reverse Calendar Spread**

A short calendar spread is best known as a **reverse calendar spread**. As you might expect, a reverse time spread involves the purchase of the nearby month and sale of the deferred month. With this spread, the investor is expecting to profit from a sharp movement in the price of the underlying product in either direction or a sharp move downward in implied volatility.

An investor in a short calendar spread should always receive a net premium at the outset, which is his maximum profit if prices do move sharply as expected. If prices do not move, the spread will widen because of time decay, and the position will lose money. If the short position is kept after the long position expires, the spread will convert to a naked short call or put and potential losses become unlimited.

SAMPLE QUESTION

Shauna executes an at the money short put calendar spread. The strike price for both legs is $20. Her long, nearby put costs her $4, and her short deferred-month put yields $6. When the nearby month expires, the market price is still $20. If she decides to offset the deferred month, is she most likely to have gained or lost money?

Answer: She will have lost money. Both puts remain at the money so their value is strictly limited to the value of the two premiums. Neither has any intrinsic value. The nearby premium has lost all its time value. Since the deferred month generally loses time value at a slower rate, the spread will have widened. Suppose when Shauna offsets her short position in the

---

deferred month, she pays a premium of $3. She will have lost $4 on the long put and gained $3 on the short put.

5.3.6. DIAGONAL CALENDAR SPREADS

A calendar spread in which the nearby option and the deferred option have different strike prices is known as a **diagonal calendar spread**. The two legs of a diagonal spread have both a different strike price and a different expiration month. A long diagonal call (or put) spread can earn greater profits than a straight calendar spread if the price of the commodity is expected to increase (or decrease) at a moderate rate. Traders might like a long diagonal spread when they expect prices to be slightly bullish but volatilely low.

> **Example:** Suppose corn is selling in the cash market at 376'0 and you are expecting prices to rise over the next few months. You execute the following diagonal spread:
>
> Short Jul 390'0 Call @ 15'0
> Long Sep 380'0 Call @ 22'0
>
> Both of these options are well out of the money. This is a debit diagonal call because you have paid more for the long call than you have received for the short. When the July option expires, corn prices have climbed to 389'0. The July option expires out of the money, and you retain the 15-cent premium. But the September option is in the money. The premium now has intrinsic value and has retained much of its time value. You offset the September option and receive an 18-cent premium. Your net loss on the September option is only $0.04 for a net gain on the spread of $0.11 per bushel, or $550 (0.11 x $5,000).

A long (debit) diagonal spread earns its greatest profits when the short, near-term option expires at the money and the long deferred-month option is in the money. Its greatest losses occur when the market price has either fallen (for a call) or risen (for a put) sufficiently that neither option has any time value. If market prices of a diagonal call have dropped, the loss is the net cost of the debit spread—seven cents in the above example. If market prices have climbed, the loss is two cents. This is the sum of the difference between the two strike prices (a 10-cent gain) and the difference between the two premiums (a 12-cent loss).

The opposite is true of a short or **reverse diagonal calendar spread.** Here the expectation is for a highly volatile price.

> **Example:** Suppose you believe corn prices will rise dramatically from its current cash price of 376'0. You execute the following diagonal spread:
>
> Long Jul 360'0 Put @ '10
> Short Sep 376'0 Put @ '22
>
> This is a short diagonal put calendar spread because you receive a credit from the two premiums. If prices rise so dramatically that the time value of both options

drops to zero, the profit you receive will be at its maximum at 12 cents per bushel. If prices fall so dramatically that the time value of the premiums disappears, that 12-cent profit will be reduced by the 10-cent loss you will sustain when you offset both options. If prices fall to 360'0, the July put will expire out of the money at a 10-cent loss. The September put will have a higher premium because it now has intrinsic value, and time value has decayed only moderately. When you purchase the September option at 17 cents to offset your short position, you will have incurred a net loss on the spread of five cents per bushel.

With a short diagonal call or put spread, you expect highly volatile market prices. If you expect a dramatic rise in prices, you will write a short put diagonal spread. If you expect a dramatic fall in prices, you will buy a short call diagonal spread.

5.3.7. **CARRY VS. INVERTED SPREADS**

In a normal market, as we know, the cash price of a commodity is always lower than its nearby futures price, which is also lower than the price of the deferred month. The cost of carry is positive and additive from one month to the next. Option premiums in a normal market also increase as you move from the nearby month to a deferred month and as the market price of the underlying product moves away from the strike price in either direction.

An options spread in a normal market is called a **carry spread**. An **inverted spread** is one in which market prices of the underlying product are inverted or backwardated, and the option premiums are lower in the deferred than the nearby month. That means that a hedger or speculator who wants the spread to widen will enter a reverse calendar spread. One who wants the spread to narrow will enter a calendar spread.

The same applies to vertical spreads. Where in a normal market you would buy a bull call spread, in an inverted market you would buy a bear call spread.

⛓️ EXERCISE

ANSWER TRUE OR FALSE.

1. _____ Horizontal spreads involve one put and one call, each with a different expiration date but the same strike price.

2. _____ In a calendar spread, the longer-term option generally has less time value than the shorter-term option.

3. _____ The time value of the deferred option in a calendar spread is more sensitive than the nearby to changes in implied volatility.

4. _____ A long calendar spread investor profits when the spread narrows; a short calendar spread investor profits when the spread widens.

5. _____ While a neutral calendar spread has limited profit potential, a long calendar spread's potential profits are unlimited.

6. _____ A short calendar spread, also known as a reverse calendar spread, occurs when an investor shorts the deferred option and goes long the nearby option.

7. _____ A spread with two puts or calls that have the same expiration date but different strike prices is known as a diagonal calendar spread.

8. _____ A debit call diagonal spread experiences its greatest losses when the price of the underlying futures contract's price has increased well above the strike price.

9. _____ An investor in a reverse diagonal calendar spread profits from a highly volatile price.

10. _____ An inverted spread is one in which market prices of the underlying product are inverted, meaning the option premiums are higher in the deferred month than the nearby month.

Answers: 1. False; 2. False; 3. True; 4. False; 5. True; 6. True; 7. False;8. False; 9. True; 10. False

---

5.4. **SUMMARY**

Investors have learned to combine call and put options in a variety of creative ways to take advantage of various situations and protect themselves against risk. We have examined but a few of the synthetic options, combinations, and spreads in the investors' toolbox.

Synthetic options offer the combination of long and short futures contracts with simple calls and puts. They provide hedgers and speculators with a certain flexibility to move out of one position into another quickly and cheaply. They also promise greater leverage than simple calls and puts because their lower risk allows for lower margin requirements. Like simple options, synthetics take a position on the direction of market prices in the underlying instrument.

Investors also use vertical spreads to speculate on the direction of market prices. Vertical spreads are the purchase and sale of either two puts (put spread) or two calls (call spread) at different strike prices. A long call or put spread (debit spread) costs a net initial outlay. Its investors hope to see their two premiums widen and their position to terminate in the money. A short call or put spread (credit spread) gains a net initial revenue. Its investors hope to see their two premiums narrow and their position to expire out of the money. Unlike synthetic options, investors in vertical spreads expect and desire little price movement. With both long and short positions, investors have chosen to cap potential gains in order to limit potential losses.