

## Question #1 of 26

Which of the following positions represents a straddle?

- A) Buy a 100 call, buy a 105 put.
- B) Buy a 100 call, write a 105 put.
- C) Write a 100 call, write a 100 put.



### Explanation

A long straddle consists of long positions in a call option and a put option with the same exercise price. A short straddle consists of short positions in a call option and a put option with the same exercise price.

(Study Session 14, Module 41.5, LOS 41.g)

### Related Material

[SchweserNotes - Book 4](#)

## Question #2 of 26

An investor buys a 60 put for a premium of \$6.25 and sells a 50 put for a premium of \$1.50. This position will be *most* profitable if the stock price on the day the options expire is:

- A) \$65.00.
- B) \$45.00.
- C) \$55.00.



### Explanation

The position described is a bear spread, which reaches its maximum profit when the stock price is at or below the lower of the two exercise prices. In this case, at a stock price of \$45 on the expiration date, the 60 put would be worth \$15 and the 50 put would be worth \$5, for a net profit of  $\$15 - \$5 - (\$6.25 - \$1.50) = \$5.25$ .

(Study Session 14, Module 41.3, LOS 41.h)

### Related Material

[SchweserNotes - Book 4](#)

### Question #3 of 26

An investor who creates a long straddle *most likely* expects the underlying security to:

- A) increase in price.
- B) increase in volatility.
- C) remain near its current price.



#### Explanation

A long straddle profits if the volatility of the underlying security increases more than is reflected in current option prices, which would increase the value of both the call option and the put option. Either a significant increase or a significant decrease in the underlying price would benefit the holder of a long straddle. If the investor was expecting only an increase in price, long call would be a better choice of investment (as the premium paid on the long put would be a waste).

(Study Session 14, Module 41.5, LOS 41.g)

#### Related Material

SchweserNotes - Book 4

### Question #4 of 26

An investor who owns a stock establishes a same-strike collar on the stock. The combined position has a payoff diagram *most* similar to a:

- A) risk-free asset.
- B) bull spread.
- C) straddle.



#### Explanation

Combining a long position in a stock with a collar in which the long put and the short call have the same exercise price results in a payoff at expiration that is equal to the exercise price regardless of the stock price. This is equivalent to a risk-free asset that pays the exercise price at maturity. A bull spread has a payoff diagram similar to a collar in which the call and put options have different exercise prices.

(Study Session 14, Module 41.4, LOS 41.g)

#### Related Material

SchweserNotes - Book 4

## Question #5 of 26

The primary downside in creating a protective put position is that:

- A) the stock price can decrease to zero.
- B) it requires paying a premium.
- C) the stock price can increase without limit.



### Explanation

The downside risk of a protective put position consists of the premium paid for the put option. If the stock price increases, the option premium paid decreases the overall return, especially if the protective put position is maintained over time.

(Study Session 14, Module 41.2, LOS 41.d)

### Related Material

[SchweserNotes - Book 4](#)

## Question #6 of 26

In which type of swap contract is notional principal *most likely* to be exchanged at initiation?

- A) Equity swap.
- B) Interest rate swap.
- C) Currency swap.



### Explanation

Notional principal is typically exchanged at initiation of a currency swap, but not in an interest rate swap or equity swap.

(Study Session 14, Module 41.1, LOS 41.a)

### Related Material

[SchweserNotes - Book 4](#)

## Question #7 of 26

An investor who purchased a stock for \$25 establishes a collar using a 28 call and a 22 put, each of which has a premium of \$0.85. Which of the following statements about this position is *most accurate*?

**A)** The maximum gain on the position occurs at a stock price of \$26.30 or greater.



**B)** The breakeven stock price is \$25.



**C)** The maximum loss on the position is zero.



#### Explanation

To establish a collar the investor would buy the put and sell the call. In this case, because the premiums are equal, the cost of the collar is zero so the breakeven stock price is its purchase price of \$25. The maximum loss on the position is \$3, which is the potential decrease in the stock price from \$25 to the \$22 exercise price of the put. The maximum gain on the position of \$3 occurs at a stock price of \$28 or greater because the stock will be called for \$28.

(Study Session 14, Module 41.3, LOS 41.h)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #8 of 26

An investor that takes a calendar spread position is *least likely* to be attempting to benefit from:

**A)** mispriced options.



**B)** an increase in volatility.



**C)** time decay.



#### Explanation

In a calendar spread the investor writes an option with a nearer expiration and buys an option with a later expiration. This position benefits from time decay which is greater for options nearer to expiration. The holder of a calendar spread will benefit from increasing volatility, because the price of the long-term option purchased will increase more than will the price of the short-term option that was sold.

(Study Session 14, Module 41.5, LOS 41.i)

#### Related Material




[SchweserNotes - Book 4](#)

---



## Question #9 of 26

An investor holds a long position in a stock and a short forward position on half the shares of the stock. The investor's position delta can be replicated by:

- A) an at-the-money covered call, but not by an at-the-money protective put. 
- B) either an at-the-money covered call or an at-the-money protective put. 
- C) an at-the-money protective put, but not by an at-the-money covered call. 

### Explanation

Because a long position in a stock has a delta of 1.0 per share and a short forward position in a stock has a delta of  $-1.0$  per share, the combination of a long position in a stock and a short forward position in the stock has a position delta of 0.5 per share. This is also the approximate position delta of an at-the-money covered call or an at-the-money protective put. Any of these three positions should experience similar gains or losses for small changes in the stock price.




(Study Session 14, Module 41, LOS 41.f)

### Related Material

[SchweserNotes - Book 4](#)

## Question #10 of 26

An investor buys a stock for \$30 and writes a call option on the stock with an exercise price of \$33 when the premium on such an option is \$1. Which of the following statements about this position is *most accurate*?

- A) The investor will break even if the stock price decreases to \$29. 
- B) The maximum gain is \$4 and occurs if the stock price is \$31 or higher. 
- C) The maximum loss is \$1 and occurs if the stock price is \$29 or lower. 

### Explanation

This is a covered call position. The investor collects the premium of \$1 and will break even if the stock price decreased by \$1 to \$29. The maximum loss on the position is \$29 if the stock price decreases to zero because the investor will lose \$30 on the stock but keeps the \$1 option premium. The maximum gain is \$4 because if the stock price increases to \$33 or more, the option holder will exercise and pay the investor \$33 for the stock. The investor will realize a gain of \$3 on the stock plus \$1 for collecting the option premium.

(Study Session 14, Module 41.2, LOS 41.e)

### Related Material

SchweserNotes - Book 4

---

**Question #11 of 26**

If a fixed-income portfolio manager enters an interest rate swap on the pay-fixed side, what effect will this *most likely* have on overall portfolio duration?

A) Increase.



B) Decrease.



C) No effect.

**Explanation**

Because an asset that receives floating-rate payments is likely to have a lower duration than an asset that receives fixed-rate payments, an interest rate swap position that pays fixed and receives floating would most likely decrease the duration of a fixed-income portfolio.

(Study Session 14, Module 41.1, LOS 41.a)

**Related Material**

SchweserNotes - Book 4

---

**Question #12 of 26**

In an equity return swap for Libor, if the return on the underlying equity portfolio is negative for a payment period, the equity return payer will:

A) receive a net payment less than the loss of value on the equity portfolio.



B) make a net payment greater than the loss of value on the equity portfolio.



C) receive a net payment greater than the loss of value on the equity portfolio.

**Explanation**

The equity return payer will receive the periodic interest payment and "pay" the negative return on the portfolio, resulting in a net payment to the equity return payer that is greater than the loss on the equity portfolio.

(Study Session 14, Module 41.1, LOS 41.a)

**Related Material**

SchweserNotes - Book 4

---

### Question #13 of 26

Combining a short position in a stock with a long position in a call option on the stock will produce a payoff pattern equivalent to a:

- A) risk-free security. ✗
- B) short position in a put option on the stock. ✗
- C) long position in a put option on the stock. ✓

#### Explanation

The combined payoff pattern of a short position in a stock and a long call option on the stock is the same as the payoff pattern of a long put option on the stock.

(Study Session 14, Module 41.1, LOS 41.b)

#### Related Material

[SchweserNotes - Book 4](#)

### Question #14 of 26

An investor establishes a bull spread using a 20 call with a premium of \$3.50 and a 26 call with a premium of \$1.00. On the expiration date of the calls, this spread has a:

- A) maximum profit of \$3.50. ✓
- B) maximum loss of \$4.50. ✗
- C) breakeven stock price of \$24.50. ✗

#### Explanation

To establish a bull spread the investor would buy the 20 call and sell the 26 call. The maximum profit occurs at a stock price of \$26 or more, at which the expiration value of the 20 call is \$6 greater than the expiration value of the 26 call. The maximum gain =  $X_H - X_L - C_{L0} + C_{H0} = \$26 - \$20 - \$3.50 + \$1.00 = \$3.50$ . The maximum loss is equal to the net cost of \$2.50 and occurs at a stock price of \$20 or less, at which both options would expire worthless. The position breaks even at expiration if the 20 call is worth \$2.50 more than the 26 call, which occurs at a stock price of \$22.50.

(Study Session 14, Module 41.3, LOS 41.h)

#### Related Material

[SchweserNotes - Book 4](#)

### Question #15 of 26

An equity portfolio manager who has a positive long-term outlook for equities, but expects equity prices to decline over the next three months, would *most appropriately* enter into:

- A) a calendar spread.
- B) an equity swap.
- C) a covered call position.



#### Explanation

By entering an equity swap as the equity return payer, the manager can protect the portfolio value from a short-term decline in equity prices while keeping ownership of the equities for the longer term. A calendar spread is typically used as a means of exploiting the time decay of options. A covered call position would provide only limited downside protection in the form of the option premium received but would still leave the portfolio exposed to risk of large decreases in equity prices.

(Study Session 14, Module 41.3, LOS 41.j)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #16 of 26

To create a synthetic short position in a stock, an investor can buy:

- A) a put option on the stock and sell a call option on the stock.
- B) a call option on the stock and sell a put option on the stock.
- C) both a call option on the stock and a put option on the stock.



#### Explanation

Buying a put option and writing a call option results in a payoff pattern similar to that of a short position in the underlying stock.

(Study Session 14, Module 41.1, LOS 41.b)

#### Related Material


[SchweserNotes - Book 4](#)

---



## Question #17 of 26

Compared to the delta of a long position in a stock, the delta of an at-the-money call option on the stock is *most likely* to be:

- A) less. 
- B) the same. 
- C) greater. 

### Explanation

The delta of an at-the-money call option is typically close to 0.5. The delta of a long position in the underlying stock is 1.0 by definition.

(Study Session 14, Module 41, LOS 41.f)




### Related Material

[SchweserNotes - Book 4](#)

---

## Question #18 of 26

An investor is long a call option with an exercise price of 30. The investor can create a bear spread by:

- A) buying a call option with an exercise price of 25. 
- B) writing a call option with an exercise price of 25. 
- C) buying a put option with an exercise price of 35. 

### Explanation

A bear spread can be created using either two call options or two put options, by buying an option at one exercise price and writing an option at a *lower* exercise price.

(Study Session 14, Module 41.3, LOS 41.g)

### Related Material

[SchweserNotes - Book 4](#)

---

## Question #19 of 26

The primary advantage of a collar as compared to a protective put is that a collar:

A) has more upside potential.



B) provides more downside protection.



C) has a lower cost.



#### Explanation

With a collar, the premium received for selling a call can offset the premium paid to buy a put. This reduces the cost of the same downside protection but at a cost of forgoing the upside potential.

(Study Session 14, Module 41.4, LOS 41.g)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #20 of 26

A 42 call has a premium of \$0.55 and a 42 put has a premium of \$1.45. For an investor who establishes a long straddle with these options, the maximum loss occurs if the stock price on the day the options expire is:

A) either \$40 or \$44.



B) between \$40 and \$44.



C) exactly \$42.



#### Explanation

A long straddle consists of long positions in both call and a put with the same exercise price. The maximum loss occurs if the stock price at option expiration equals the exercise price of the options because neither the call nor the put will be in the money. At any other stock price, one of the options is in the money by the difference between the stock price and the exercise price.

(Study Session 14, Module 41.3, LOS 41.h)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #21 of 26

The payoff diagram of a covered call position is *most* similar to that of:

A) buying a put option.



B) a protective put position.



C) writing a put option.



#### Explanation

A covered call has a maximum loss if the stock price goes to zero and a maximum gain that is limited if the stock price increases. This payoff pattern is similar to that of a short position in a put option.

(Study Session 14, Module 41.1, LOS 41.c)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #22 of 26

The payoff diagram of a protective put position is *most* similar to that of:

A) selling a call option.



B) buying a call option.



C) a covered call position.



#### Explanation

A protective put position limits the potential loss from holding a stock while preserving its upside potential. The payoff diagram of a protective put is similar to that of a long call option.

(Study Session 14, Module 41.2, LOS 41.d)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #23 of 26

Which of the following positions represents a bull spread?

A) Long 45 call, short 40 call.



B) Long 40 call, short 45 put.



C) Long 40 put, short 45 put.



**Explanation**

A bull spread can be created using either two call options or two put options, by buying an option at one exercise price and writing an option at a *higher* exercise price.

(Study Session 14, Module 41.3, LOS 41.g)

**Related Material**

SchweserNotes - Book 4

---

**Question #24 of 26**

The investment objective of an investor who creates a covered call position is *most likely* to:

A) protect against loss.



B) generate income.



C) benefit from increasing volatility.

**Explanation**

A covered call consists of a long position in a stock and a short position in a call option on the stock. Writing the call option generates income for the investor but gives up potential gains if the stock price increases. If the stock price decreases the investor keeps the option premium but still experiences losses on the stock. The investor is short the option and therefore does not benefit from an increase in volatility.

(Study Session 14, Module 41.1, LOS 41.c)

**Related Material**

SchweserNotes - Book 4

---

**Question #25 of 26**

An investor establishes a protective put position consisting of a stock she bought for \$80 and an option with a premium of \$2 and an exercise price of \$75. The investor's maximum loss:

A) occurs at a stock price of \$85 or greater.



B) is equal to \$2.



C) occurs at a stock price of \$75 or less.

**Explanation**



The maximum loss is \$7 and occurs at a stock price of \$75 or less, at which the investor will exercise the put option and sell the stock for \$75. The loss equals \$5 on the stock (bought for \$80 and sold for \$75) plus the \$2 premium paid for the put option. The maximum gain on a protective put position is unlimited because the stock price is potentially unlimited and the investor will keep the stock if its price increases.

(Study Session 14, Module 41.3, LOS 41.e)

#### Related Material

[SchweserNotes - Book 4](#)

---

### Question #26 of 26

The maximum payoff on a bull spread with option exercise prices at 21 and 23:

- A) occurs at any stock price below 21.
- B) occurs at any stock price above 23.
- C) is unlimited.



#### Explanation

The payoff on a bull spread is at its maximum at any stock price greater than the higher exercise price and at its minimum at any stock price less than the lower exercise price.

(Study Session 14, Module 41.3, LOS 41.g)

#### Related Material

[SchweserNotes - Book 4](#)