

## 8.05 Pricing and Valuation of Forward Contracts and for an Underlying with Varying Maturities

### Question 1

An investor can *most closely* create a synthetic short position in a 30-day forward rate agreement (FRA) on 60-day LIBOR by simultaneously:

- A. buying a 60-day zero-coupon bond and selling a 30-day zero-coupon bond.
- B. buying a 90-day zero-coupon bond and selling a 30-day zero-coupon bond.
- C. buying a 30-day zero-coupon bond and selling a 90-day zero-coupon bond.

### Question 2

An analyst gathers the following data:

Selected Data	
Bond price	100
Coupon rate	6%
Risk-free rate	4%

The bond has exactly 10 years until maturity and pays coupons annually. There are no other costs or benefits while holding the bond. A 1-year forward contract created with an initial value of zero *most likely* has an agreed-on price:

- A. less than 100.
- B. equal to 100.
- C. greater than 100.

### Question 3

The seller of a forward rate agreement (FRA) is *most likely* trying to:

- A. hedge a future lending rate.
- B. hedge a future borrowing rate.
- C. speculate on rising interest rates.

### Question 4

If the benefits of holding an asset are greater than the cost of holding it, futures contracts on the asset *most likely* trade at prices:

- A. below the spot price.
- B. equal to the spot price.
- C. above the spot price.

### Question 5

A corporate borrower plans to close on a bank loan in 30 days, when the loan terms will be finalized. The interest rate on the loan is tied to 90-day LIBOR. Based on only this information, which of the following transactions *most appropriately* hedges the company's interest rate risk?

- A. Long 30-day forward rate agreement (FRA) on 90-day LIBOR
- B. Long 90-day forward rate agreement (FRA) on 90-day LIBOR
- C. Long 120-day forward rate agreement (FRA) on 90-day LIBOR

**Question 6**

Buying a forward rate agreement (FRA) is *most* similar to:

- A. paying a fixed interest rate and receiving a floating interest rate.
- B. paying a floating interest rate and receiving a fixed interest rate.
- C. paying a floating interest rate over one term and receiving a floating rate over a longer term.

**Question 7**

*Most likely*, the long party in a forward rate agreement (FRA) benefits if forward rates:

- A. decrease before the FRA expires.
- B. do not change before the FRA expires.
- C. increase before the FRA expires.

**Question 8**

Which of the following positions is *most likely* equivalent to selling a 90-day forward rate agreement on a 180-day interest rate?

- A. Simultaneously going long a 270-day deposit and going short a 90-day deposit
- B. Simultaneously going long a 180-day deposit and going short a 90-day deposit
- C. Going long a 90-day deposit and, when that deposit matures, going long a 180-day deposit