

1. Correct answer: C.

Because the share price (S_T) is greater than the strike price (X), the investor collects the premium plus the difference between the strike price and purchase price: $X - S_0 + c_0$. In this case, $100 \times (\text{€}55 - \text{€}50 + \text{€}1) = \text{€}600$.

2. Correct answer: C.

A futures contract is classified as a forward commitment in which the buyer undertakes to purchase the underlying asset from the seller at a later date and at a price agreed on by the two parties when the contract is initiated.

3. Correct answer: A.

A is correct. Although an exchange-traded fund derives its value from the underlying assets it holds, it does not transform the performance of those assets and so is not a derivative.

B is incorrect. A contract to sell Alphabet Inc.'s shares transforms the performance of the underlying shares of Alphabet Inc and is an example of an option derivative.

C is incorrect. A contract to buy Australian dollars transforms the performance of the underlying currency and is an example of a currency derivative.

4. Correct answer: C.

Prior to expiration, an American call option will typically have a value in the market that is greater than its exercise value. Although the American option is at-the-money and therefore has an exercise value of zero, the time value of the call option would likely lead to the option having a positive market value.

5. Correct answer: A.

As opposed to a futures contract, trading out of a forward contract is quite difficult. There is no exchange of cash at the origination of a forward contract. There is no exchange on a forward contract until the maturity of the contract.