Team 1

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Pham Dieu Linh

There are some European call and put options on an option chain as follows:

Strike Price	Call Price	Put Price
\$40	\$11	\$3
\$50	\$6	\$8
\$55	\$3	\$11

John tells Mary and Peter that no arbitrage opportunities can arise from these prices. Mary disagrees and argues: Long one call option with strike price 40; short three call options with strike price \$50; lend \$1; and long some calls with strike price \$55. Peter also disagrees and claims Long 2 calls and short 2 puts with strike price \$55; long 1 call and short 1 put with strike price \$40; lend \$2; and short some calls and long the same number of puts with strike price \$50.

(A) Only John is correct.
(B) Only Mary is correct.
(C) Only Peter is correct.
(D) Both Mary and Peter are correct.

Yak Sze Hao

Which of the following statements is the odd one out?

(A) The higher the volatility of the underlying asset, the more valuable is the option.

(B) The lower the strike price, the more valuable is the call option.

(C) The seller of a call option has the right to sell the underlying asset to the option buyer at the predetermined strike price.

(D) An out-of-the-money option has zero intrinsic value.

Liu Yiwen

Options have an advantage over futures because:

(A) They provide a more certain hedge.

(B) They provide a hedge without removing the opportunity to make a profit.

(C) They are less likely to require delivery of the underlying asset.

(D) They are likely to be cheaper because all one is buying is the right to do something.

Park Yong Shin

Using a binomial tree, calculate the call price when initial stock price is \$100 and the strike price is \$105. The risk free rate is 2.5% and date to maturity is 1 year. Important information: N = 3, up = 1.35, down = 0.74. The call price is closest to

(A) \$23.37

(B) \$23.89

(C) \$24.64

(D) \$24.91