

EXAM FM QUESTION OF THE WEEK

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Week of May 5/08

You are given call option prices of \$12 and \$8 for European options with strike prices of \$50 and \$60, respectively. The options expire at the same time and are on a non-dividend paying stock. According to convexity of option prices, how many of the following prices are feasible prices for a call option on the same stock and expiring at the same time with a strike price of \$53? Feasible means that there are no arbitrage opportunities.

- I. \$10 II. \$10.50 III. \$11 IV. \$11.50
A) None B) One C) Two D) Three E) All

The solution can be found below.

Week of May 5/08 - Solution

We must have $\frac{12-C(53)}{53-50} \geq \frac{C(53)-8}{60-53} \rightarrow C(53) \leq 10.80$.

Two prices are feasible. Answer: C