

EXAM FM QUESTIONS OF THE WEEK

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Week of March 26/07

A stock that pays no dividends is currently priced at $S_0 = 100$. The delivery price for a one-year forward contract on the stock is $F_{0,1} = 105$. Find the payoff and the profit at time 1 for the following scenarios:

- (a) long position on the forward contract, $S_1 = 100$,
- (b) long position on the forward contract, $S_1 = 120$,
- (c) short position on the forward contract, $S_1 = 100$,
- (d) short position on the forward contract, $S_1 = 120$.

The solution can be found below.

Week of March 26/07 - Solution

For a forward contract, profit = payoff.

Payoff at time 1 on long forward position = $S_1 - F_{0,1}$, so (a) - 5, (b) 15.

Payoff at time 1 on short forward position = $F_{0,1} - S_1$, so (a) 5, (b) - 15.