

## EXAM FM QUESTION OF THE WEEK

S. Broverman, 2008

### Week of May 12/08

An "exchange call option" gives the owner of the option the right to give up one share of Stock A in exchange for receiving one share of Stock B. Stock A currently has a price of \$56 and Stock B has a current price of \$52. The continuously compounded risk-free rate of interest is 5% and the price of a one-year European exchange call option is \$7.

Suppose that neither Stock A nor Stock B pays any dividends. Find the price of a European exchange put option expiring in one year which gives the owner the right to give up one share of Stock B in exchange for receiving one share of Stock A.

A) \$3    B) \$5    C) \$7    D) \$9    E) \$11

**The solution can be found below.**

## **Week of May 12/08 - Solution**

According to put-call parity

$$P + \text{prepaid forward price of asset to be received} \\ = C + \text{prepaid forward price of asset to be delivered} .$$

Therefore  $P + 52 = 7 + 56$  , so that  $P = 11$  . Answer: E