Econ 337
Spring 2014
Extra Credit
30 points, 10 points per question
Tell me where you want your extra credit points applied (total should add to $100 \%$ ):
$\qquad$ \% Homework $\qquad$ \% Exams
$\qquad$ \% Marketing Assignment

For the following questions use the attached futures and options data. Assume historical expected basis of $-\$ 0.25$ per bushel and a commission of $\$ 0.01$ per bushel for both crops.

## Show the math and draw the graph.

1. A corn producer buys a $\$ 5.00$ put option and sells a $\$ 6.00$ call option on Dec. 2014 corn futures, what is her floor price? Does she have a price ceiling under this strategy? If so, what is it? If the Dec. 2014 corn futures price rises to $\$ 5.80$, what is her net price?

## Return/Net Price


2. A corn producer buys a $\$ 6.00$ put option on Dec. 2014 corn futures. What is her floor price with the option in place? If the Dec. 2014 corn futures price falls to $\$ 3.75$, what is her net price?

Return/Net Price

3. Instead of buying that $\$ 6.00$ put option (in question \#2), the producer does a short hedge.

What is her floor price with the short hedge in place? If the Dec. 2014 corn futures price falls to $\$ 3.75$, what is her net price?

## Return/Net Price



All prices and premiums are listed in dollars per bushel
Dec. 2014 Corn
Futures 4.96
Price

| Options | Strike Price | Premium | Options | Strike Price | Premium |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Put | 4.50 | 0.20 | Call | 4.50 | 0.67 |
| Put | 4.60 | 0.24 | Call | 4.60 | 0.61 |
| Put | 4.70 | 0.28 | Call | 4.70 | 0.55 |
| Put | 4.80 | 0.33 | Call | 4.80 | 0.50 |
| Put | 4.90 | 0.38 | Call | 4.90 | 0.45 |
| Put | 5.00 | 0.44 | Call | 5.00 | 0.41 |
| Put | 5.10 | 0.50 | Call | 5.10 | 0.37 |
| Put | 5.20 | 0.56 | Call | 5.20 | 0.33 |
| Put | 5.30 | 0.63 | Call | 5.30 | 0.30 |
| Put | 5.40 | 0.70 | Call | 5.40 | 0.27 |
| Put | 5.50 | 0.77 | Call | 5.50 | 0.24 |
| Put | 5.60 | 0.84 | Call | 5.60 | 0.21 |
| Put | 5.70 | 0.92 | Call | 5.70 | 0.19 |
| Put | 5.80 | 1.00 | Call | 5.80 | 0.17 |
| Put | 5.90 | 1.08 | Call | 5.90 | 0.15 |
| Put | 6.00 | 1.16 | Call | 6.00 | 0.14 |
| Put | 6.10 | 1.25 | Call | 6.10 | 0.12 |
| Put | 6.20 | 1.34 | Call | 6.20 | 0.11 |
| Put | 6.30 | 1.42 | Call | 6.30 | 0.10 |
| Put | 6.40 | 1.51 | Call | 6.50 | 0.09 |
| Put | 6.50 | 1.60 | Call | 6.60 | 0.08 |
| Put | 6.60 | 1.70 | Call | 6.70 | 0.07 |
| Put | 6.70 | 1.79 | Call | 6.80 | 0.06 |
| Put | 6.80 | 1.88 | Call | 6.90 | 0.04 |
| Put | 6.90 | 1.98 | Call | 7.00 | 0.03 |
| Put | 7.00 | 2.07 |  |  |  |

