

Econ 337
Final
100 points possible

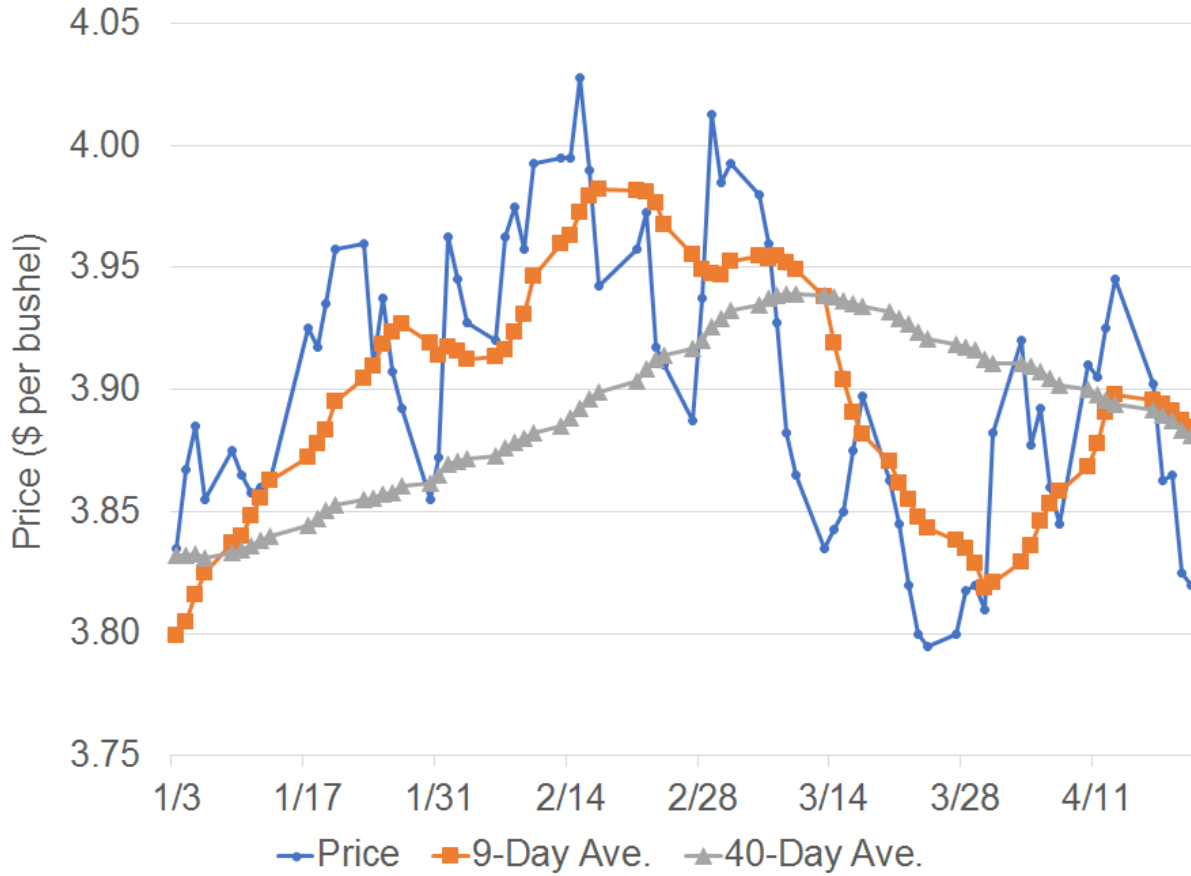
Name _____
Spring 2017
Due 5/4/2017 @ 10am

Short Answer (2 points each)

1. Pick a day between April 27 and May 3 and give me the date and the settlement price for the May 2017 Class III milk futures.
2. On that same date you chose above (in question #1), what is the strike price for the nearest in-the-money put option for May 2017 Class III milk futures?
3. On that same date you chose above (in question #1), what is the intrinsic value for a \$4.50 put option for July 2017 corn futures?
4. On that same date you chose above (in question #1), what is the time value for a \$10 call option for November 2017 soybean futures?
5. On that same date you chose above (in question #1), what is the spread between the August and October 2017 lean hog futures?

Short Answer (4 points each)

6. Below are the futures price, 9-day, and 40-day moving averages for November 2017 soybeans.



Looking at the 9-day average versus the 40-day average:
How many buy signals have we had since the 1st of the year?

What was the last signal we received (buy or sell)?

7. Name 4 steps in developing a marketing plan.

8. Name 2 marketing moves you would want to make if you thought futures prices are going higher, but the basis is going to weaken.

9. Name 2 of the 3 ways fed cattle are typically sold.

Long Answer (10 points each)

10. How much are the total storage and opportunity costs for corn in storage given the following details?

40,000 bushels of corn stored for 6 months

Storage charges of 3 cents per bushel for each month

Harvest price of \$3.05 and a short-term interest rate of 3%

11. Given the data below, compute a 14-day Relative Strength Index for Nov. 2017 soybeans.

<u>Date</u>	<u>Futures Price</u>
3/31/2017	9.54
4/3/2017	9.5025
4/4/2017	9.49
4/5/2017	9.54
4/6/2017	9.5075
4/7/2017	9.495
4/10/2017	9.4975
4/11/2017	9.485
4/12/2017	9.555
4/13/2017	9.6175
4/17/2017	9.6225
4/18/2017	9.5675
4/19/2017	9.5825
4/20/2017	9.5375
4/21/2017	9.595

12. Given an expected basis of \$1.00 under futures and a broker commission of \$0.25 per cwt. for trading live cattle options, calculate the floor prices for the following Oct. 2017 live cattle put options.

Strike Price	Premium
\$108	\$3.325
\$110	\$4.075
\$112	\$4.950
\$114	\$5.975
\$116	\$7.125

Margins (12 points)

13. I am a hedger that went short on June 2017 lean hogs on Apr. 13, 2017 at \$72.50 per cwt. The initial margin requirement is \$1,320. The maintenance margin is \$1,200. Fill out my margin account for one futures contract.

Date	Futures Price	Gain/Loss	Margin Call	Account Balance
4/13/2017	\$72.50	X	X	\$1,320.00
4/17/2017	\$72.35			
4/18/2017	\$71.50			
4/19/2017	\$69.95			
4/20/2017	\$68.68			
4/21/2017	\$68.33			

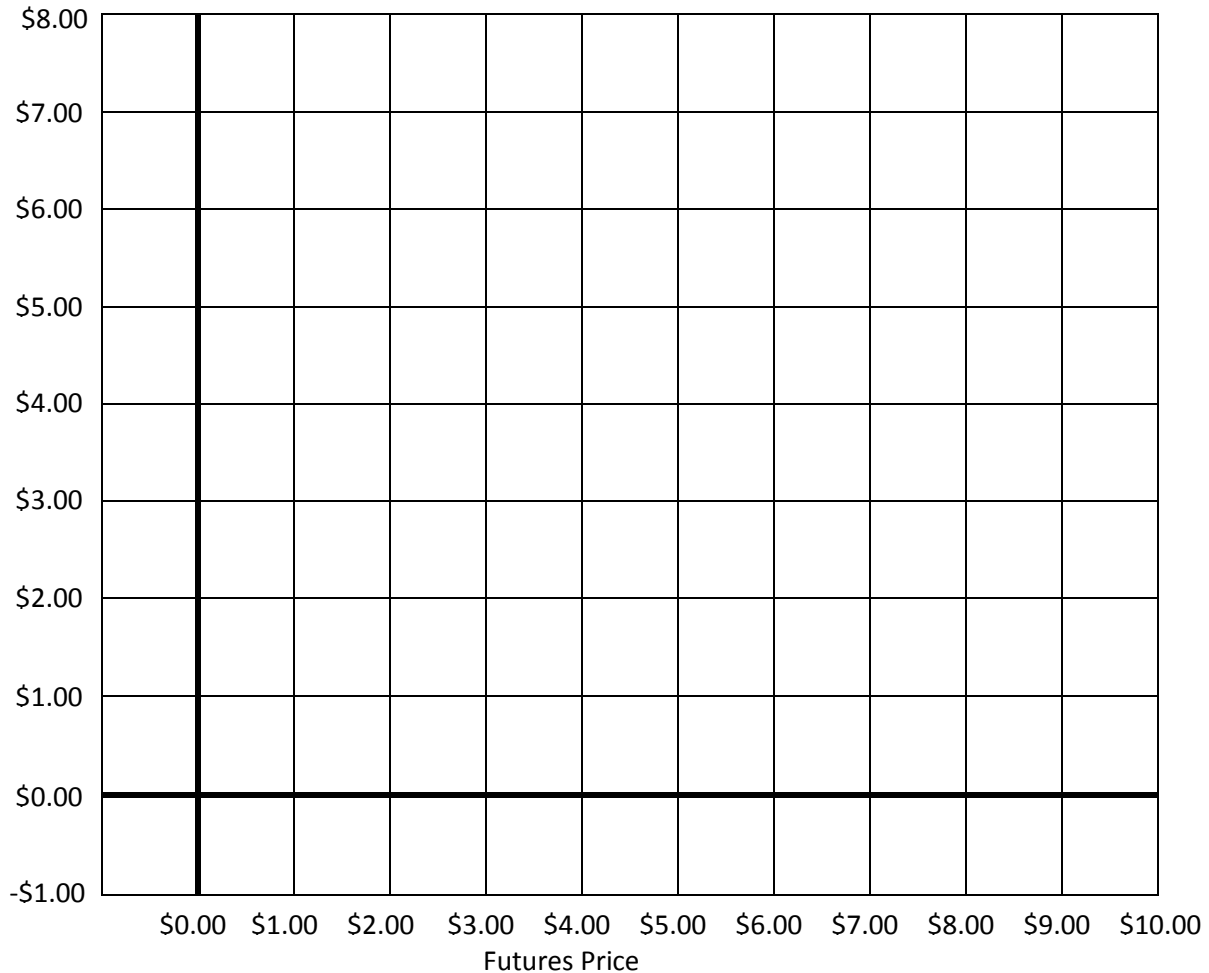
Math and Graph (16 points each, please show your work)

Assume historical expected basis of $-\$0.25$ per bushel and a commission of $\$0.01$ per bushel for corn. Please graph the relevant cash price, futures/options return, and net price lines.

14. A corn producer does a short hedge for Dec. 2017 at a futures price of $\$3.82$ per bushel. What is her floor price with the short hedge in place?

If the Dec. 2017 corn futures price falls to $\$3.50$, what is her net price?

Return/Net Price



15. A corn producer is using a “window” or “fence” strategy to protect against price risk. She buys a \$4.00 put option on Dec. 2017 corn. The premium for the put option is \$0.39. At the same time, she sells a \$5.00 call option on Dec. 2017 corn. The premium for the call option is \$0.05.

What is her floor price?

If the Dec. 2017 corn futures rises to \$5.25, what is her expected net price?

If the Dec. 2017 corn futures falls to \$3.00, what is her expected net price?

