| Name:  |
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| Econ 337 Agricultural Marketing, Spring 2018   |
| Homework Assignment 2; Due February 8, 2018 (Beginning of Class)   |
| 1) A summer backgrounder operator decided to hedge 750 pound feeder steers to be sold in October. He/she sold October futures at \$142.225 per cwt and expected basis to be \$7.960 per cwt for the quality of steers they will be selling. Assume brokerage commission is \$60/round turn or \$0.150 per cwt. |
| a) What price does the backgrounder think they have locked in for these steers come October?   |
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| Parts b and c are stand alone questions using this same initial position from question 1.  |
| b) In October, the backgrounder sells the steers for \$164.975 per cwt and closes his/her futures contract at a price of \$153.090 per cwt.  |
| -what is the gain/loss on the futures position?  |
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| -what did basis turn out to be?  |
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| -what is the net selling price on the calves?  |
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| -Is the expected selling price equal to the net selling price? If yes, why? If not, why not?   |
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| c) Forget part b! In October, the backgrounder sells the steers for \$156.765 per cwt and closes his/her futures contract at a price of \$149.675 per cwt. |
| -what is the gain / loss on the futures position?  |
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| -what did basis turn out to be?  |
| -what did basis turn out to be?  |
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| -what is the net price on the calves?   |
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| -Is the expected selling price equal to the net selling price? If yes, why? If not, why not?  |
| 2) Go back to the scenario set up in problem #1. A summer stocker operator decided to protect cattle to be sold in October. October futures are trading at \$142.225 per cwt and basis is expected to be \$7.960 per cwt for the quality of steers they will be selling. However, instead of a straight hedge, the backgrounder decided to purchase a put option with a \$135 strike price for \$4.900 per cwt. Assume brokerage commission is \$30 (\$0.075/cwt) to buy an option contract and \$30 (\$0.075/cwt) to sell offset a futures position.  a) What price floor does the backgrounder think they have set? |

| Parts b and c are stand alone questions using this same initial position from question 2.   |
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| b) In October, the backgrounder sells the steers for \$155.765 per cwt. The futures price has risen to \$147.805 per cwt. Does the backgrounder want to excise his/her option?  |
| -What will be the net price for the calves?   |
| c) In October, the backgrounder sells the steers for \$137.960 per cwt. The futures price has fallen to \$130.000 per cwt. Does the backgrounder want to excise his/her option? |
| -What will be the net price for the calves?   |

3. This question is designed to give you some practice using spreadsheets and estimating basis for feeder cattle. Use the "CombinedAuctionIA-Feeder Cattle Cash Prices" and "Feeder Futures Prices" spreadsheets to estimate basis for each month and each year for feeder cattle. Calculate the 5-year average basis by month. Using a spreadsheet will be much quicker than doing this by hand.

Write your basis estimates into the table below, or attached a print out of the table.

Combined Iowa auction feeder cattle basis, 2013-2017 for 700-800 lb no. 1 steers (\$/cwt)

| Market<br>Period | Contract<br>For Basis | 2013  | 2014<br>Basis | 2015<br>Basis | 2016<br>Basis | 2017<br>Basis | 5-yr Avg<br>Basis |
|------------------|-----------------------|-------|---------------|---------------|---------------|---------------|-------------------|
|                  |                       | Basis |               |               |               |               |                   |
| January          | January               |       |               |               |               |               |                   |
| February         | March                 |       |               |               |               |               |                   |
| March            | March                 |       |               |               |               |               |                   |
| April            | April                 |       |               |               |               |               |                   |
| May              | May                   |       |               |               |               |               |                   |
| June             | August                |       |               |               |               |               |                   |
| July             | August                |       |               |               |               |               |                   |

## Notes:

August

October

September

November

December

- 1/ Basis is calculated as Cash Futures. A negative sign means that futures are greater than cash.
- 2/ Cash price is for large and medium frame steers.

August

October

January

September

November

Describe the seasonal basis pattern for Iowa 700-800 lb large and medium frame no. 1 steers. You can just describe the basic seasonal pattern and in which month basis is the highest and lowest. Also note if there is a month that seems like an outlier. Using the 5-year average calculation to describe would be appropriate.