1) T or F The U.S. produces over 200 billion pounds of milk per year.

2) T or F Class I milk is for fluid milk consumption.

3) T or F Marketing orders only exist for milk.

4) T or F Cyclical price patterns are driven by weather, holidays and input prices.

5) T or F Since 1990, basis adjusted futures prices performed much better than the seasonal index at forecasting cattle and hog prices.

6) T or F Livestock Revenue Protection insurance is available for purchase from 5:00 pm to 9:00 am

7) T or F Livestock Revenue Protection insurance does not have basis risk because it settles against a live animal index.

8) T or F Less than 10% of market hogs are sold via the spot market in 2010.

9) T or F A higher percentage of fed cattle than market hogs are “captive” by packer ownership or marketing contract.

10) T or F Centralized pricing refers a single entity like a coop or consortium negotiating a price for its members.

Multiple Choice (3 points each)

The most common form (based on percent of marketings) of market hog procurement is:
   a) Cost plus pricing based on feed costs
   b) Packer ownership
   c) Formula contract based on pork or hog prices
   d) Window price contract with upper and lower limits
   e) Cash market

If the packer is offering a carcass price bid that is higher than the wholesale meat price (boxed price) what must be true?
   a) They are not covering their variable cost and are trying to increase volume.
   b) The non-carcass revenue (hide and offal) is higher than the cost to operate the plant.
   c) The dressing percent of animals has increased to make up the difference.
   d) Wholesale meat prices will increase to cover the cash prices they are bidding.
   e) All of the above

Which of the following are not true of cycles in livestock markets:
   a) They have been recognized and studied for decades
   b) They are driven by profit motives and limited by biology
   c) They repeat themselves with some predictability over more than one year.
   d) They are easy to profit from by using counter cyclical investment strategies
   e) All of these statements are true.
(5 points) Name 5 jobs of a marketing order.
- Regulate milk prices
- Classify milk by its final use
- Establish minimum Class and Component prices
- Enforce payments for milk in supply chain
- Verify with a test
(4 points) Name 2 factors that differentiate milk prices among producers.
- Milk composition/components or list
- Milk quality
- Location of producer

(4 points) Agricultural insurance protects in a similar way to an option, paying off when events move in an adverse direction. Livestock Gross Margin (LGM) is like a combination of options; it's like having Put options on the dairy, beef cattle, or hogs and Call options on the feed.

(2 points) Identify two primary determinates of premiums and discounts in value-based hog marketing programs.

- Leanness
- Weight

(2 points) If the cost of everything except the animal itself to finish a 750 pound yearling steer is $600 what is the breakeven purchase price for the steer if the finish weight is 1350 pounds and expected selling price is $115/cwt live weight? Show your work.

\[
\frac{1350 \times 115 - 600}{750} = 127
\]

(6 points) Discuss the primary differences between live weight, in-the-meat and value-based (grid) selling and who stands the grading risk.

- Live = \( \bar{x} \) live \# total
- Meat = \( \bar{x} \) meat \# carcass \# total
- Grid = (individual value \times individual \#) \# Seller

(10 points) Discuss three different procurement methods for slaughter hogs today and discuss a possible problem with current procurement methods and why it is a concern to both packers and producers.
(6 points) Compare and contrast Livestock Revenue Protection insurance to CME put options.

Both have floor different basis.

LRP: flex size after hours.

(6 points) Compare and contrast Livestock Revenue Protection insurance to Livestock Gross Margin insurance.

LRP: only revenue available daily.

GGM: margin.

Both flex size tied to futures.

(12 points) A feedlot has received three bids from three different packers for their cattle. The trucking cost is the same across the three bids. The feedlot manager believes the cattle have a dressing percent of 63% and have 20% CAB, 30% Select and 20% Yield Grade 1&2 and 10% Yield Grade 4&5. Show your work. Which bid should he accept? What factors influence your decision?

A. Live bid on $100/cwt weighed off the truck at the plant.

B. In-the-meat bid of $161

C. A grid base bid of $162 with premiums and discounts of: CAB $7.00, Select -$5.00, Yield Grade 1&2 $3.00 and Yield Grade 4&5 -$15.00 (all in $/cwt carcass).

Choose B

No grade risk

Higher price
Assume the following estimated cost of production for finishing a weaned pig and the future and options information available at the time the pigs were purchased.

<table>
<thead>
<tr>
<th>Cost</th>
<th>$/head</th>
<th>$/cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pig</td>
<td>36</td>
<td>Futures 86.00</td>
</tr>
<tr>
<td>Feed</td>
<td>110</td>
<td>Basis -1.00</td>
</tr>
<tr>
<td>Non Feed Variable</td>
<td>12</td>
<td>Put Option</td>
</tr>
<tr>
<td>Fixed</td>
<td>8</td>
<td>Strike Premium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88.00   5.50</td>
</tr>
<tr>
<td>Live weight</td>
<td>270</td>
<td>86.00  4.00</td>
</tr>
<tr>
<td>Dressing %</td>
<td>0.75</td>
<td>84.00  2.75</td>
</tr>
</tbody>
</table>

a) What is the carcass price needed to cover variable cost of production?

78.02

b) What is the carcass price needed to cover total cost of production?

81.92

c) What risk management strategy would give the farmer the highest probability of a profitable price given this information? Show your work.

Sell futures 85 ≤ 81.92

5

d) What strategy will protect his variable cost and allow the highest probability of reaching an $87/cwt net live price.

Buy 84 put floor = 80.25

greater prob of P > 87 because it is cheap.

Futures won't get 87.