

Utah FFA State Finals
2017 Meats Evaluation and Technology CDE
Meat Formulation Problem- Team Activity

USDA Regulation for Ground Beef:

Ground Beef: The terms “ground beef” and “chopped beef” are synonymous. Products so labeled must be made with fresh and/or frozen beef with or without seasoning and without the addition of fat as such, and shall contain no more than 30% fat. It may contain added water, binders or extenders. It may contain beef cheek meat not to exceed 25%. Heart meat and tongue meat are not acceptable ingredients. The Technical Requirements Schedule (TRS) – GB 2003 requires potential contracts to designate, in their technical proposal, a laboratory to conduct microbiological testing of boneless beef.

Specifications on ground beef for this activity:

1. All fresh products must be stored at a temperature not to exceed 34 degrees Fahrenheit.
2. No variety meats may be used.
3. No product more than three days old may be used.
4. Least cost determined should be performed on acceptable ingredients to select the lowest cost product that meets all ground beef guidelines.

You have received an order with the following specifications:

Desired fat content of finished product 12%
Batch size 7,500 lbs.
Manufacture date= April 25, 2017

Available Ingredients

<u>Material</u>	<u>Slaughter Date</u>	<u>Temperature</u>	<u>Fat Content</u>	<u>Price</u>
75% Lean Trim	April 22	35 Degrees	25%	\$2.40
Boneless Chuck	April 23	33 Degrees	19%	\$2.65
85% lean trim	April 22	32 Degrees	15%	\$2.50
90% lean trim	April 24	31 Degrees	10%	\$3.55
Trimming Bin A	April 24	34 Degrees	8%	\$3.70
Trimming Bin B	April 21	34 Degrees	15%	\$2.95

Instructions: Carefully read each item and possible answer. Circle the correct formulation (10 points) and the most correct multiple choice answer for each question (5 points each).

Solution- Which of the following was the correct formulation for this problem? Circle the correct answer.

1. 75% Lean and Boneless Chuck
2. Trimmings Bin A and 90% Lean
3. Boneless Chuck and Trimmings Bin A
4. 85% Lean and 90% Lean
5. 85% Lean and Trimmings Bin A
6. Trimmings Bin A and 75% Lean
7. Boneless Chuck and 90% Lean
8. 75% Lean and Trimmings Bin B
9. 85% Lean and 75% Lean
10. 90% Lean and Trimmings Bin B

1. What is the price per pound for the correct batch?

- a. \$2.56
- b. \$3.13
- c. \$3.02
- d. \$2.43

2. What percent of the final batch was Boneless Chuck?

- a. 0%
- b. 91%
- c. 67%
- d. 94%

3. How much lean was in the final batch?

- a. 4275 lbs.
- b. 7500 lbs.
- c. 900 lbs.
- d. 6600 lbs.

4. Which ingredient was excluded because of freshness?

- a. Beef Kidneys
- b. Trimmings Bin B
- c. Boneless Chuck
- d. 75% Lean

5. How many pounds of the final product is 85% trim?

- a. 0 lbs.
- b. 4275 lbs.
- c. 3225 lbs.
- d. 1650 lbs.

6. What percent of the final batch was lean?

- a. 12%
- b. 15%
- c. 80%
- d. 88%

7. How much money was required to purchase the Trimmings Bin A for this batch

- a. \$11932.50
- b. \$10687.50
- c. \$0
- d. \$15995.00

8. How much 75% Lean was in the final batch?

- a. 0 lbs.
- b. 2625 lbs.
- c. 4275 lbs.
- d. 3225 lbs.