

National FFA Organization
2017 Meats Evaluation & Technology CDE
Meat Formulation Problem Solving

Ground Pork, Veal and Lamb Trimmings are often ground and merchandised as fresh (unseasoned) products. They may be packaged separately, or sometimes these ground meats are merchandised in combination packages, perhaps labeled as “For Meat Loaf.” The regulatory standards (to date) do not cover the lean-to-fat ratio of these co-mingled products, but care should be taken, nonetheless, to produce consistent quality and to carefully label each package as to the species origin of its content. A seasoned preparation of “Pork Sausage” may be merchandised fresh for the meat case, sometimes labeled or advertised as a breakfast meat, or perhaps as a stuffing ingredient. Although regulations stipulate no greater than 50% fat content. It remains that ground meats and ground beef, in particular, are a favored “cut” appearing in many recipe forms on the American table. Great care should be taken by retailers to present it as “freshly ground” and accurately labeled. Your task is to derive the least cost batch formulation for a “Fresh Ground Pork” product.

Specifications on “Ground Pork” for this activity:

1. Ingredients must be pork.
2. All fresh products must be stored at a temperature not to exceed 30° F.
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 pork guidelines.

You have received an order with the following specifications:

Desired fat content of finished product = 25%
Batch size = 2,000 lbs.
Manufacture date = Thursday, October 26, 2017

Product	<u>Available Ingredients</u>		% Fat Content	\$ Price/lb.
	Slaughter Date	Temperature “°F”		
42% Pork Trim Combo	October 24	31°	58%	.38
42% Pork Trim Boxed	October 25	29°	58%	.56
72% Pork Trim Boxed	October 24	30°	28%	.74
Pork Trim w/Trace Combo	October 24	29°	42%	.82
Pork Blade Meat Boxed	October 23	29°	22%	1.05
90% Ham Trim	October 22	30°	10%	.97
70% Beef Lean Trim	October 23	30°	30%	1.68

Instructions: Carefully read each item and possible answers. Mark the correct answers on the appropriate CDE form. Completely fill the chosen ovals to indicate your answers. You may write on this exam and utilize the back of other printed exams for scratch paper.

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Solution

Which of the following was the correct formulation for this problem?

1. 42% Pork Trim Boxed & 90% Ham Trim
2. 42% Pork Trim Boxed & Pork Blade Meat Boxed
3. 42% Pork Trim Combo & 70% Beef Lean Trim
4. 42% Pork Trim Combo & 90% Ham Trim
5. 42% Pork Trim Combo & Pork Blade Meat Boxed
6. 72% Pork Trim Boxed & 90% Ham Trim
7. 72% Pork Trim Boxed & Pork Blade Meat Boxed
8. Pork Trim w/Trace Combo & 90% Ham Trim
9. Pork Trim w/Trace Combo & Pork Blade Meat Boxed
10. Pork Blade Meat Boxed and Lamb Trim

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Questions

1. What was the price per pound of the correct final batch?
 - A. \$0.88
 - B. \$0.90
 - C. \$1.00
 - D. \$1.01
 - E. \$1.02
2. What was total final cost of the correct final batch?
 - A. \$1,790.00
 - B. \$1,992.80
 - C. \$2,021.60
 - D. \$2,031.00
 - E. \$2,521.40

3. How much of the correct final batch consisted of 42% Pork Trim Combo?

- A. 0 lbs.
- B. 61 lbs.
- C. 160 lbs.
- D. 740 lbs.
- E. 1,000 lbs.

4. What percentage of the correct final batch consisted of Pork Blade Meat Boxed?

- A. 0%
- B. 50%
- C. 85%
- D. 92%
- E. 100%

5. How much of the correct final batch consisted fat?

- A. 0 lbs.
- B. 250 lbs
- C. 500 lbs.
- D. 1,000 lbs.
- E. 2,000 lbs

6. Which product was not considered for the batch due to freshness?

- A. 42% Pork Trim Boxed
- B. 42% Pork Trim Combo
- C. 70% Beef Lean Trim
- D. 90% Ham Trim
- E. All products met the standard

7. How much 72% Pork Trim Boxed was in the correct final batch?

- A. 0 lbs.
- B. 72 lbs.
- C. 500 lbs.
- D. 740 lbs.
- E. 1,000 lbs.

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<i>KEY</i>

<u>Item</u>	<u>Answer</u>
Solution	#7
1.	B
2.	A
3.	A
4.	B
5.	C
6.	D
7.	E