

2011 Iowa State FFA Meat Judging Contest – Key

A. Ground Beef Formulation Problem

65% lean trim	35%	5%	5/20=25% x 1500= 375 lbs. 65% lean trim
		20%	
bull meat	15%	<u>15%</u> 20%	15/20=75% x 1500= <u>1125 lbs.</u> bull meat
			1500 lbs. ground beef

$$\begin{array}{r}
 375 \\
 \times 1.13 \\
 \hline
 423.75
 \end{array}
 +
 \begin{array}{r}
 1125 \\
 \times 2.00 \\
 \hline
 2250.00
 \end{array}
 = \$2673.75/1500 = \$1.78 \text{ per lb.} \times 25\% \text{ markup} = \$2.23 \text{ per lb.}$$

boneless chuck	26%	5%	5/11=45.45% x 1500=682 lbs. boneless chuck
		20%	
bull meat	15%	<u>6%</u> 11%	6/11=54.55 x 1500= <u>818 lbs.</u> bull meat
			1500 lbs. ground beef

$$\begin{array}{r}
 682 \\
 \times 1.89 \\
 \hline
 1288.98
 \end{array}
 +
 \begin{array}{r}
 818 \\
 \times 2.00 \\
 \hline
 1636.00
 \end{array}
 = \$2924.98/1500 = \$1.95$$

65% lean trim	35%	5%	5/20=25% x 1500=375 lbs. 65% lean trim
		20%	
beef heart	15%	<u>15%</u> 20%	15/20=75% x 1500= <u>1125 lbs.</u> beef heart
			1500 lbs. ground beef

$$\begin{array}{r}
 375 \\
 \times 1.13 \\
 \hline
 423.75
 \end{array}
 +
 \begin{array}{r}
 1125 \\
 \times 0.71 \\
 \hline
 798.75
 \end{array}
 = \$1222.50/1500 = \$0.82 \text{ per lb.}$$

Answers:

1. C. 65% lean trim and bull meat
2. A. 375 lbs. and 1125 lbs.
3. B. \$1.78
4. B. \$2.23
5. B. be labeled as ground beef

B. Beef Carcass Pricing Problem

1. 1275 lb. live wt. x 61% DP = 777.75 lb. hot carcass weight; yes, carcass weights are acceptable

2. Base price is \$160.35/cwt
+ 3.90/cwt because of Ch+ or Ch⁰ premium
+ 3.40/cwt because of YG 2
\$167.65/cwt

3. Base price is \$160.35/cwt
- 3.00/cwt because of Se
\$157.35/cwt

4. 75 head YG2 = 30% of lot	% of total lot	price
High Choice 160.35 + 3.40 + 3.90 = \$167.65	x 15% =	\$25.15
Low Choice 160.35 + 3.40 + 0 = 163.75	x 7.5% =	\$12.28
Select 160.35 + 3.40 - 3.00 = 160.75	x 7.5% =	\$12.06
175 head YG3 = 70% of lot	% of total lot	price
High Choice 160.35 + 3.90 = 164.25	x35% =	\$57.49
Low Choice 160.35 + 0 = 160.35	x17.5% =	\$28.06
Select 160.35 - 3.00 = 157.35	x17.5% =	<u>\$27.54</u>
		\$162.58

5. B. decrease the percentage of Select Yield Grade 3 carcasses