

## Beef Management 434

### Ration Formulation #1

NAME: \_\_\_\_\_

*(If you can answer the following questions then you have learned the fundamentals of feedlot management)*

You are the manager of a 5,000 head feedlot in central Montana. It is Wednesday morning and you have taken delivery of 100, 800 lb yearlings from Havre. These are steers of mixed breeding (35 Angus, 35 Charolais, 30 Angus x Charolais). The management objectives are to feed these steers until they reach slaughter weight. After processing the yearlings, it is your opinion that the average slaughter weight of the animals will be 1325 lbs. However, you believe that the Angus steers will be done at around 1250 lbs and the Charolais steers will be finished around 1425 lbs.

1. In order to see if you know about "step-up" rations, I would like for you to formulate three rations using the Brands program. Here are the specifications for three step-ups.

Nutrient	.45 NEg (800 lbs)	.50 NEg (875 lbs)	.60 NE g (avg of ??)
NE for gain, a minimum of	.45	.50	.60
Crude protein, a minimum of	13%	13%	13%
DIP and Met. Protein	At least 100	At least 100	At least 100
Ca:P ratio	2:1	2:1	2:1

- a. What is the average weight of the steers that you will formulate the .60 NE g diet?

\_\_\_\_\_

- b. Ingredients available for inclusion into the diet

Ingredient	Cost/unit
Barley grain	\$160/ton
Corn grain	\$180/ton
Corn silage	\$35/ton
Alfalfa hay, mid bloom	\$85/ton
Mixed grass hay	\$75/ton
Grower mineral	\$750/ton
40/20 protein supplement	\$325/ton
Limestone	\$75/tpn

Corn distillers grains	\$160/ton
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- c. Please attach to this homework, your summary sheets
- d. Answer the following for the .60 NEg ration:
- a. What is the DM content of the diet? \_\_\_\_\_
  - b. What are the DM intakes Actual \_\_\_\_\_ vs. Suggested \_\_\_\_\_
  - c. What is the As Fed intake? \_\_\_\_\_
  - d. What is the Ca: P ratio? \_\_\_\_\_
  - e. What is the projected gain? ADG protein \_\_\_\_\_ ADG energy \_\_\_\_\_
  - f. What is the cost/head/day? \_\_\_\_\_
  - g. What is the cost/lb of gain? \_\_\_\_\_
  - h. How long will it take to go from 800 lbs to an average of 1325 lbs? \_\_\_\_\_
  - i. What is the predicted DMI:ADG (feed to gain ratio) for the .61 NEG \_\_\_\_\_