

Name: _____

Fall 2014

Terminology Not all terms will be used

Allele Genotype Phenotype Homozygous Heterozygous
Dominant Recessive

1. _____ The physical expression of a trait.
2. _____ A genotype which contains two identical alleles.
3. _____ An allele which can be masked or hidden and must be homozygous to be expressed.
4. _____ Genetic options or “flavors” of a particular trait which are passed from parents to offspring.
5. _____ An allele which is always expressed when present in the genotype is.

(8pts)

2. Using the Punnet Square predict the offspring of a phenotypically red Angus bull and a heterozygous dominant black Angus cow. **(BE SURE TO INCLUDE RATIOS)**

Genotypic Ratio:

Phenotypic Ratio:

What percentage of the offspring will be red? _____

What percentage of the offspring will be black? _____

EPD Examples: SEE ATTACHED DATA SHEET

3. When selecting replacement females, which Gelbvieh heifer concerns you the most in regard to birth weight and Why?

4. If you are selling your calves at slaughter weight what EPD category is most directly linked to your profit? And which heifer is best choice for this trait?

5. What is heifer K27's actual weaning weight?

6. Is the predicted average weaning weight for heifer K06's calves over or under the breed average?

(5 pts)

7. Describe two keys to safe animal handling and how you observed these rules in action during this semester.

8. Performance Data and breeding choices,

A. which 2 are EPD's expressed in a bull's grand-progeny?

- a. milking ability
- b. birth weight
- c. back fat thickness
- d. \$B

B. Which two can be individual performance data?

- a. weaning weight
- b. calving ease differential
- c. hip height
- d. milking ability

C. Which of these incorporates economic factors into genetic selection criteria?

- a. Performance Data
- b. Expected Progeny Difference
- c. Indices

(3 pts)

9. List three things a shepherd should do to ensure a successful breeding season.

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FROM YOUR PROJECT

(3 pts)

1. Circle BEEF or SHEEP

What is that species gestation period? (label in either months or days)

(2 pts)

2. What month do you plan to breed your mature females? _____

(2 pts)

3. What month do you plan for parturition? _____

(4pts)

4. Disease and Parasite Control:

A. List two disease or parasite control procedures you will use on your farm.

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(5 pts)

B. List 5 items of equipment required to achieve these tasks.

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MARKETING:

1. What is your marketing strategy? (how or where will you sell?) 2 pts

2. What month are you selling your offspring? _____

3. How many a year is your target? _____

4. What is their estimated dollar value? _____