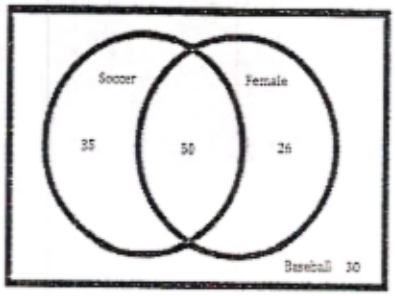
Name: _____

The following Venn Diagram represents the relationship between favorite sport (Soccer or Baseball) and gender (Female or Male).



1. How many people said soccer is their favorite sport?

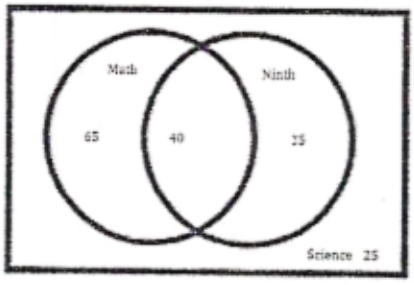
2. How many females are in the data?

3. How many males chose baseball?

4. What is the probability that a person would say soccer is their favorite sport? P(soccer) =

5. What is the probability that a female would say soccer is their favorite sport? ("Out of all females, ___% say soccer is their favorite sport") P(soccer | female) =

The following Venn Diagram represents the relationship between favorite subject (Math or Science) and grade level (Ninth or Tenth). Using this data, answer the following questions.



6. How many people said math is their favorite subject?

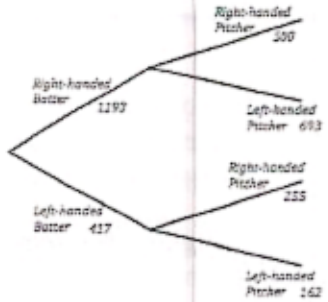
7. How many tenth graders are in the data?

8. How many ninth graders chose science?

9. What is the probability that a person would say science is their favorite subject? P(s) = 30

10. What is the probability that a tenth grader would say science is their favorite subject? ("If you are a tenth grader, then the probability of science being your favorite subject is ____ %") P(science | tenth)=

Given the tree diagram below answer the questions and determine the probabilities. The diagram represents the number of plate appearances during the first month of a minor league baseball season.



11. How many times did a batter come to the plate during this time period?

12. Based on this data, if you are a left-handed batter what is the probability that you will face a right-handed pitcher?

13. Based on this data, if you are a right-handed batter what is the probability that you will face a left-handed pitcher?

14. What is the probability that a left-handed pitcher will be throwing for any given plate appearance?

15. What is the probability that a left-handed batter would be at the plate for any given plate appearance?

16. What observations do you make about the data? Is there any amount that seems to be overly abundant? What might account for this?