Name:

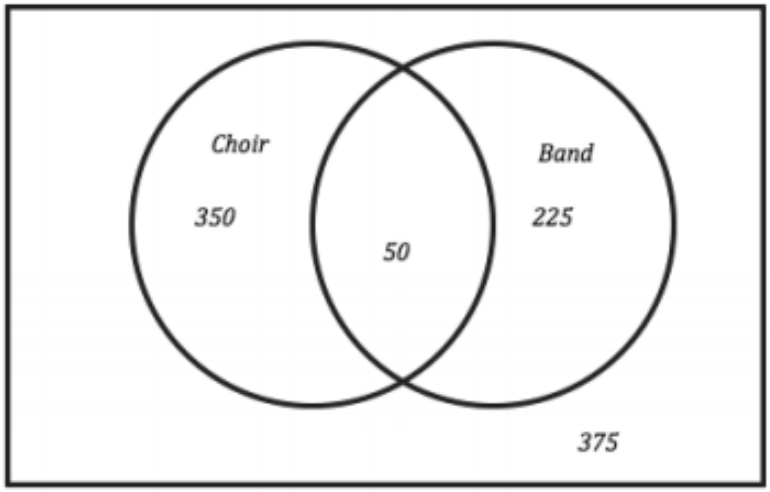
#:

/10

HOMEWORK 9.1

SECONDARY MATH II

For each Venn Diagram provided answer the questions.



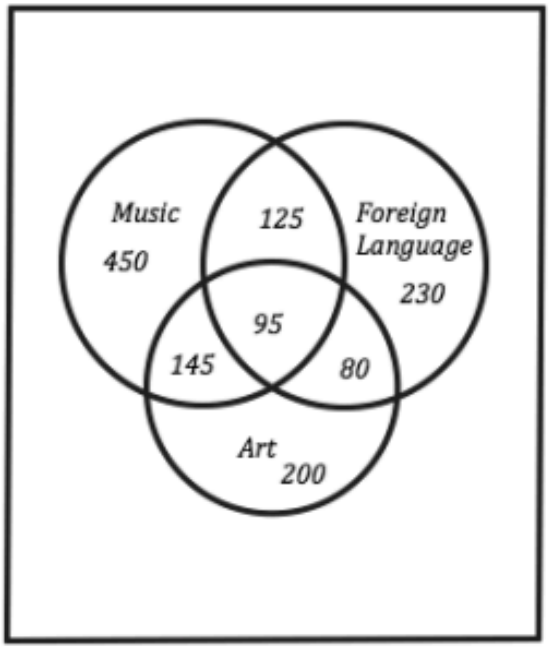
1. How many students were surveyed?

2. What were the students asked?

3. How many students are in both choir and band?

4. How many students are not in either choir or band?

5. What is the probability that a randomly selected student would be in band?



This Venn Diagram represents enrollment in some of the elective courses.

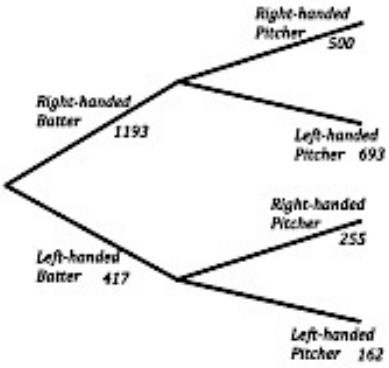
6. What does the 95 in the center tell you?

7. What does the 145 tell you?

8. How many total students are represented in the diagram?

9. Which elective class has the least number of students enrolled?

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.



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

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

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

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

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

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

Answers:

1. 1,000
3. 50
4. 375
8. 1,325
9. *Art*
10. 1,610
11. $P(A \mid B) = \frac{255}{417} = 0.61$
13. $\frac{855}{1610}$