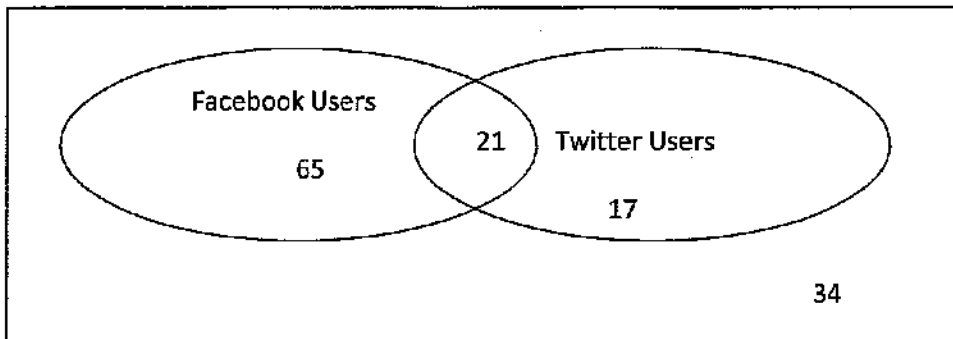


Use the following Venn diagram to answer questions 1-3. **(MAMDMD1a)**

Seniors at Locust Grove High School



1. Write 5 facts about the Venn diagram and the seniors at Locust Grove High School.

2. What is the probability that a student is a Facebook user?

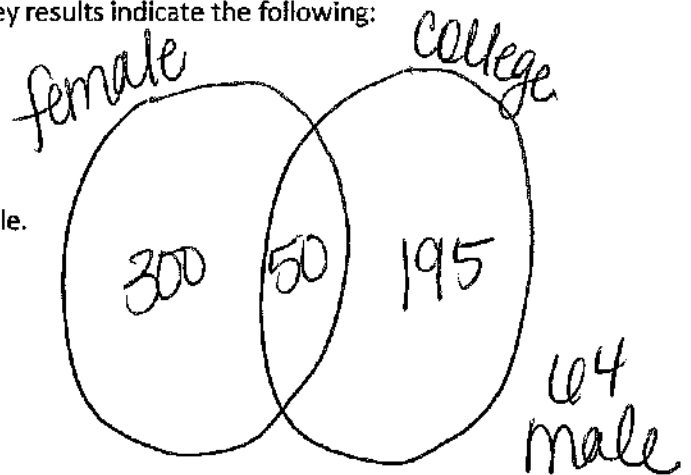
$$65 + 21 = 86 / 137 = 62.8\%$$

3. What is the probability that a student is not a Twitter user?

$$65 + 34 = 99 / 137 = 72.3\%$$

Students survey 609 spectators at a national spelling bee. The survey results indicate the following:

- 350 are female,
- 245 have a college degree, and
- 195 of the people with a college degree are male.



4. Make a Venn diagram and label the data.

$$\begin{array}{r} 350 \\ 195 \\ \hline 545 \end{array}$$

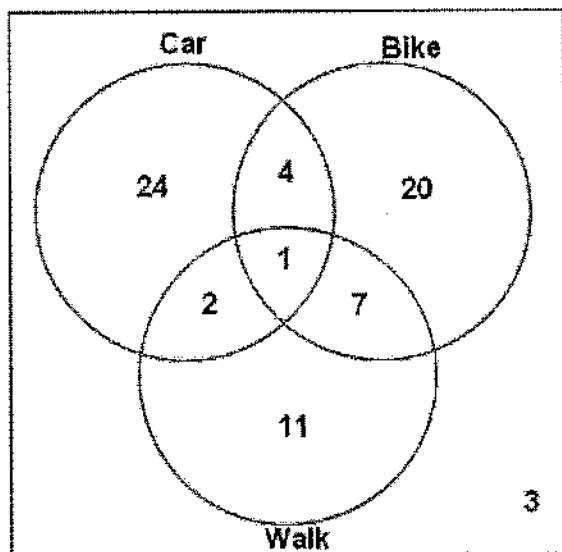
$$\begin{array}{r} 510 \\ 609 \\ - 545 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 114 \\ 245 \\ - 195 \\ \hline 50 \end{array}$$

Student Name: \_\_\_\_\_ Score: \_\_\_\_\_

**Answer the Questions Based on Venn Diagrams**

The mode of transportation to school for grade 5 students is given below:



1. How many students walk to school?

Answer: 21

2. How many students travel by bike and car but do not walk?

Answer: 4

3. How many students took this survey?

Answer: 72

4. How many students use only bikes?

Answer: 20

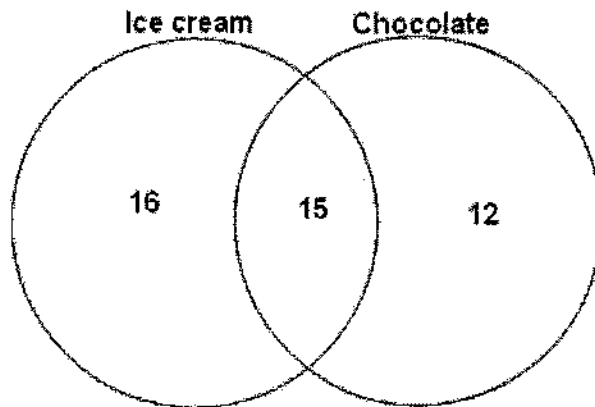
5. How many students use all the three modes of transportation?

Answer: 1

Student Name: \_\_\_\_\_ Score: \_\_\_\_\_

**Answer the Questions Based on Venn Diagrams**

The number of students who like ice cream and chocolate are given below:



1. How many students like ice cream?  
Answer: 31
2. How many students like chocolate?  
Answer: 27
3. How many students like both ice cream and chocolate?  
Answer: 15
4. How many students like only ice cream?  
Answer: 16
5. How many students like only chocolate?  
Answer: 12

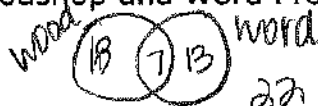
Name \_\_\_\_\_

Date \_\_\_\_\_

### Using Venn Diagrams Problems - Independent Practice Worksheet 2

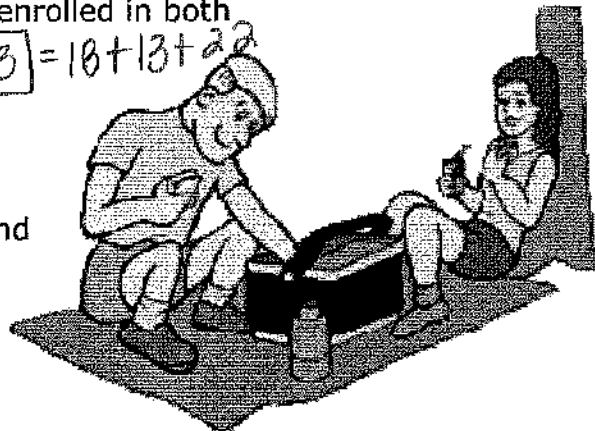
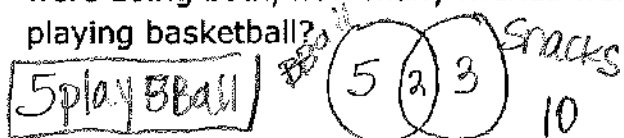
Complete all the problems. Make sure to draw Venn diagrams to help you solve the problems.

1. There were 60 students in a class. 25 students attend Woodshop class and 20 students attended Word Processing class. If 7 students were in both the classes, how many students were not enrolled in both Woodshop and Word Processing class?

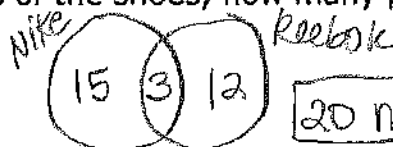


$$53 = 18 + 13 + 22$$

2. A group of 20 friends were going on a picnic. 7 friends were playing basketball and 5 friends were having snacks. If 2 friends were doing both, how many friends were playing basketball?



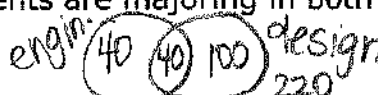
3. There were 50 people in a shoe store. 18 people were about to buy Nike shoes and 15 people were about to buy Reebok shoes. If 3 people were about to buy both brands of the shoes, how many people were in the store, but not buying shoes?



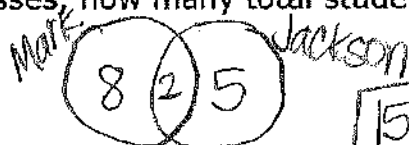
20 not buying shoes

4. There are 400 students in an institute. 20% of students are majoring in engineering and 35% of students are majoring in design. 10% of students are majoring in both fields. How many students are majoring in both fields?

40 major in both

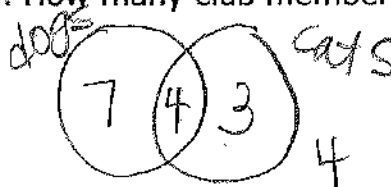


5. 10 students are taking Mark's class. 7 students are taking Jackson's class. If 2 students are taking both classes, how many total students are there in total between the two classes?



15 total

6. Out of 18 people in the Glee club, 11 have dogs and 7 have cats. Four people have both cats and dogs. How many club members have only cats?



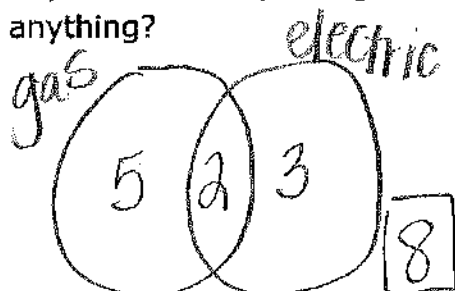
3 have only cats



Name \_\_\_\_\_

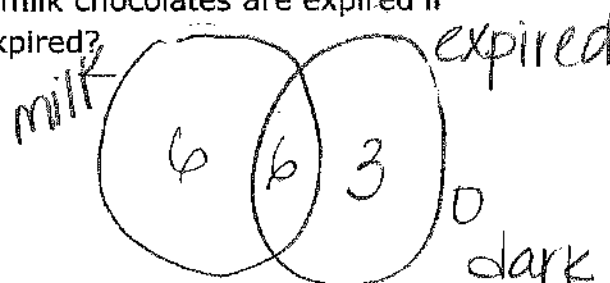
Date \_\_\_\_\_

7. There are 18 bikes in a parking lot. 7 bikes are gas powered and 5 bikes are electric powered. 2 bikes are powered by both gas and electric. How many bikes in the parking lot are not powered by anything?



8. A case of chocolate contains 15 chocolate bars. The chocolates come in three varieties milk, dark, and milk/dark mix. 6 milk chocolates and 3 dark chocolates become expired. How many of milk chocolates are expired if there are 6 milk chocolates that are not expired?

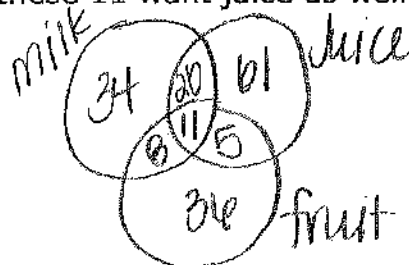
6 milks are expired



9. A nutritionist at a school is planning a schedule of breakfasts for 175 students. 73 students say they want milk, 97 want juice, and 60 want fruit. 19 say they want both milk and fruit; of these 11 want juice as well. 34 want only milk and 36 want only fruit.

How many students want juice only?

61



10. 80 students are surveyed to determine which of 3 different classes they would like to take next semester. 23 want to take only Art and 18 want to take only Business. 8 students want to take both Art and Business. 31 want to take Science. 9 students want to take both Art and Science. 2 students want to take both Business and Science. 6 students want to take all the classes.

How many students want to take Science only?



14

