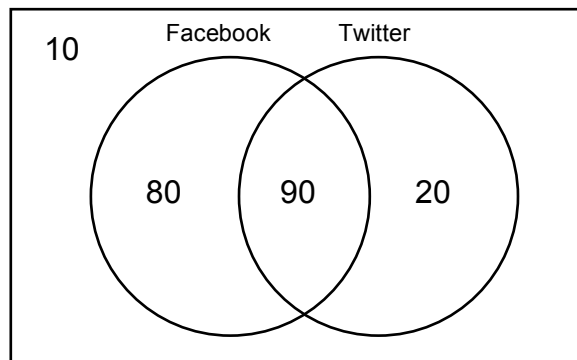


Name \_\_\_\_\_ Date \_\_\_\_\_

**Unit 9: Venn Diagram Word Problems (Day 5)**

1. Two hundred students at WHRHS were surveyed and the data collected was displayed in a Venn diagram. Using the Venn diagram, answer the following questions:

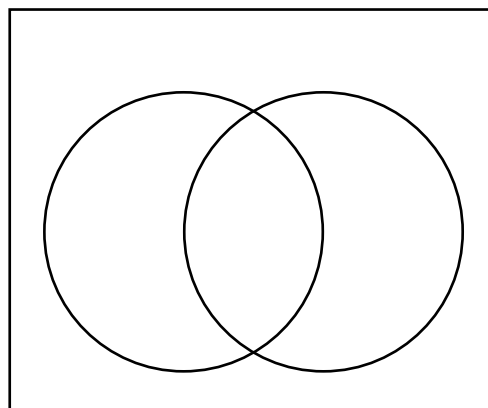
- How many students have only a Facebook account?
- How many students have only a Twitter account?
- How many students have both a Facebook and Twitter account?



- How many students have neither account?

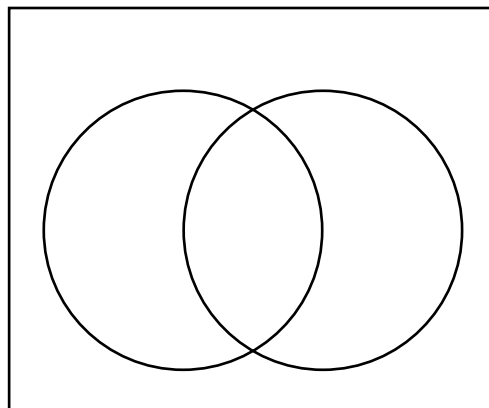
2. Of the 540 seniors at Central High School, 335 are taking a math class this year and 287 students are taking a science class. There are 220 students taking both math and science classes this year.

- How many are taking neither a math or science class?



3. Seventy-five students at a certain community college were polled about their magazine subscriptions. Forty-four students had a subscription to *Sports Illustrated*, 26 students subscribe to *People*, and 14 people subscribe to both magazines.

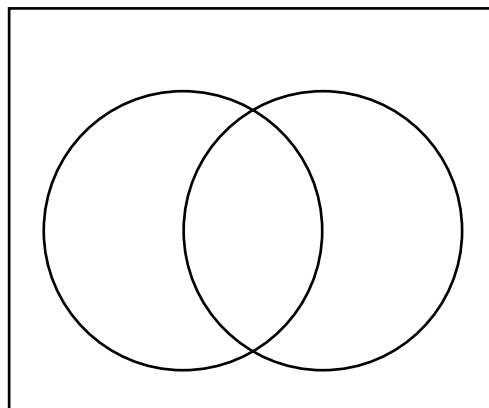
- a. How many students in this group do not subscribe to *People*?
- b. How many students do not subscribe to *Sports Illustrated*?
- c. How many students subscribe to neither magazine?



- d. How many students subscribe to *People* or *Sports Illustrated*?

4. In a certain group of 350 passengers at JFK Airport, the following information was obtained: 200 passengers purchased *The Wall Street Journal*, 140 passengers purchased *USA Today* and 45 passengers purchased newspapers.

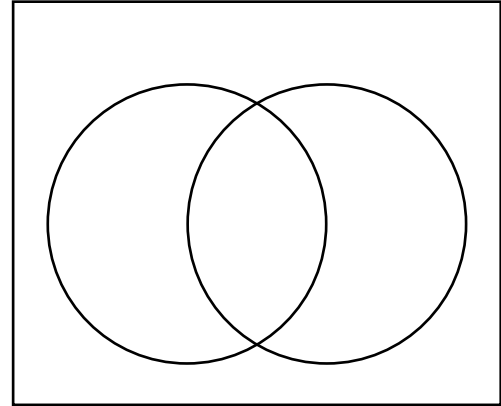
- a. How many passengers in this group did not purchase *USA Today*?
- b. How many passengers purchased neither newspaper?
- c. How many passengers purchased only *The Wall Street Journal*?



- d. How many passengers purchased *USA Today* or *The Wall Street Journal*?

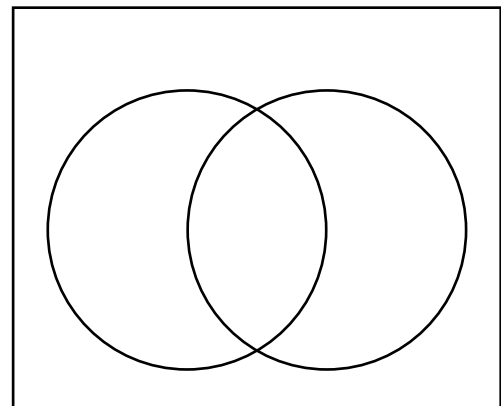
5. In an Election Day survey of 100 voters leaving the polls, 52 people said they voted for Proposition 1 and 28 said they voted for Proposition 2. Eighteen said they voted for both.

- a. How many voted for only Proposition 1?
- b. How many voted for only Proposition 2?
- c. How many voted for neither?



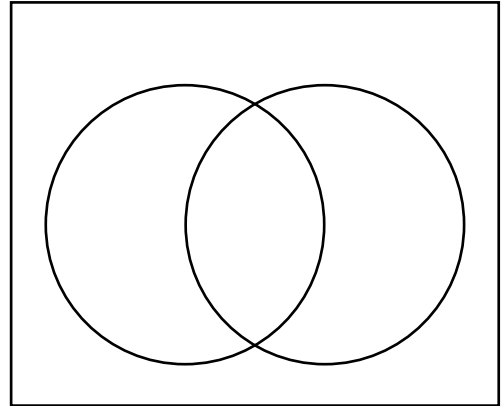
6. Although the weather was perfect for the beach party, 17 of the 30 people attending got sunburn, 25 people were bitten by mosquitoes, and 12 people were bitten and sunburned.

- a. How many people got sunburned?
- b. How many people got a mosquito bite?
- c. How many people had neither?



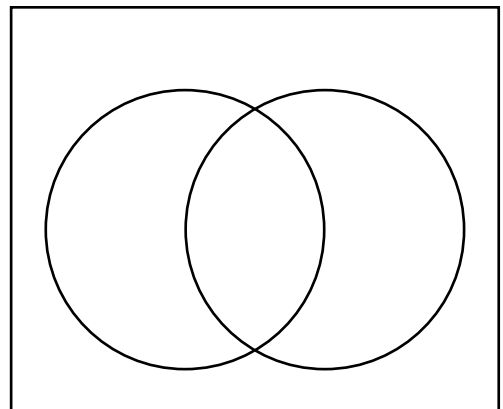
7. A survey of 150 people at Mountain Creek revealed that 87 liked to ski, 72 liked to snowboard, and three didn't like either activity.

- a. How many people only like to ski?
- b. How many people only like to snowboard?
- c. How many people like both?



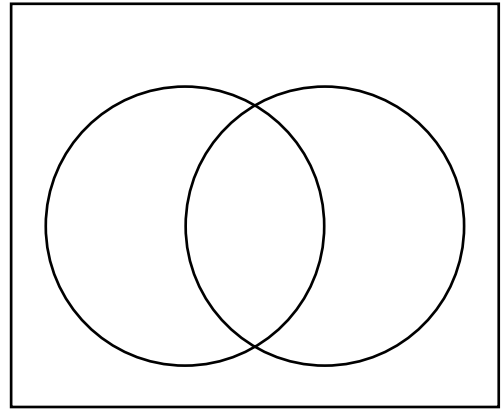
8. One hundred high school students were surveyed. Fifty of these students own an Xbox One, 45 own a PlayStation 4, and 20 have neither.

- a. How many students have both systems?
- b. How many students have an Xbox or a PlayStation?
- c. How many only have a PlayStation?
- d. How many do not have an Xbox?



9. In a survey of 48 high school students, 20 listen classic rock music and sixteen listen to country music. Twenty students said they didn't like either type of music.

- a. How many only listen to classic rock?
- b. How many only like to listen to country music?
- c. How many students like both types of music?



10. Of the 52 teachers at Roosevelt High School, 27 said they like to go sailing, 25 said they like to go fishing, and 12 said they don't enjoy either activity.

- a. How many enjoy fishing, but not sailing?

