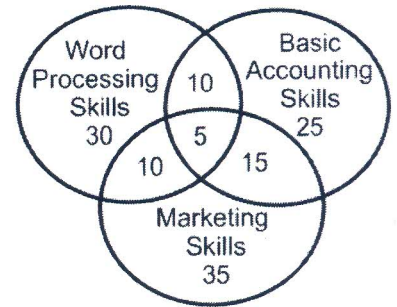


# Venn Diagrams WS

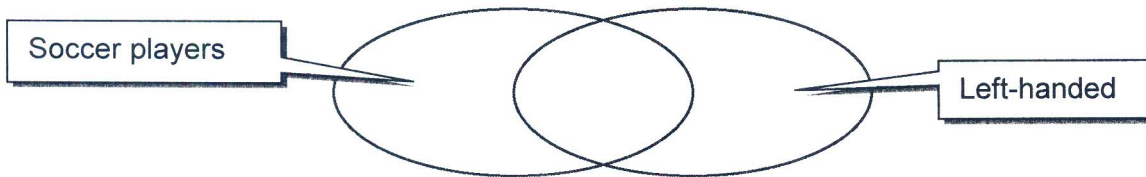
Name \_\_\_\_\_

1) Mr. Mangione, the Director of Human Resources at Ace Chemical Industries, constructed a diagram to illustrate the skills of applicants for positions in the office of his company.

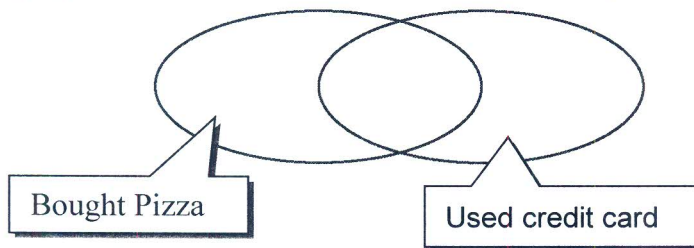
- How many applicants possess word processing skills?
- How many applicants possess only word processing skills?
- How many applicants possess only word processing and marketing skills?
- How many applicants possess word processing, basic accounting, and marketing skills?
- What is the probability that a randomly selected candidate would possess all three skills?



2) Of the 65 students going on the soccer trip, 43 are players and 12 are left-handed. Only 5 of the left-handed students are soccer players. What is the probability that one of the students on the trip is a soccer player or is left-handed?

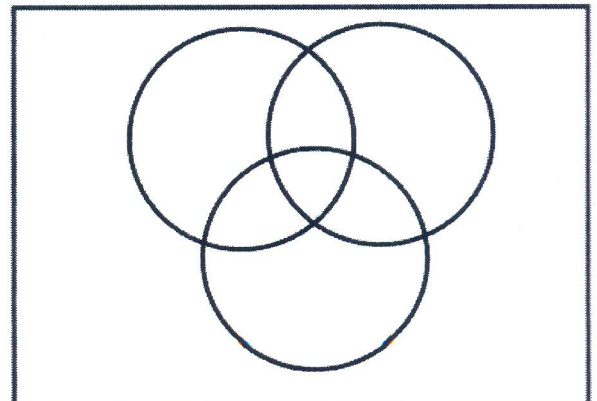


3) Of the 220 people who came into the Italian deli on Friday, 104 bought pizza and 82 used a credit card. Half of the people who bought pizza used a credit card. What is the probability that a customer bought pizza or used a credit card?



4) A study was made of 200 students to determine what TV shows they watch.

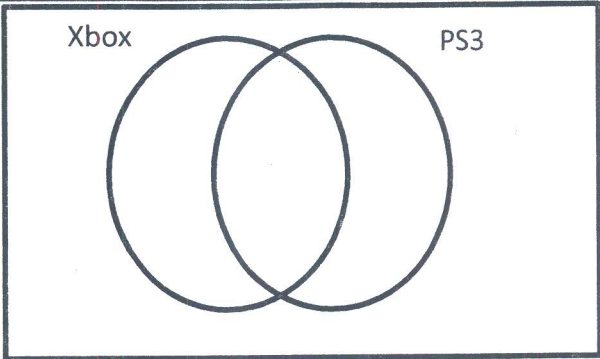
- 22 students don't watch these cartoons.
- 9 students watch all three cartoons.
- 73 students watch only Tiny Toons.
- 136 students watch Tiny Toons.
- 14 students watch only Animaniacs and Pinky & the Brain.
- 31 students watch only Tiny Toons and Pinky & the Brain.
- 63 students watch Animaniacs.
- 135 students do not watch Pinky & the Brain.



What percent of the students watch only Animaniacs?

When making your own Venn-Diagram, try to **start in the MIDDLE!!!**

Out of 19 students surveyed, 2 students did not own an Xbox or PS3, 6 students owned a PS3 and an Xbox, and 14 students owned a PS3.



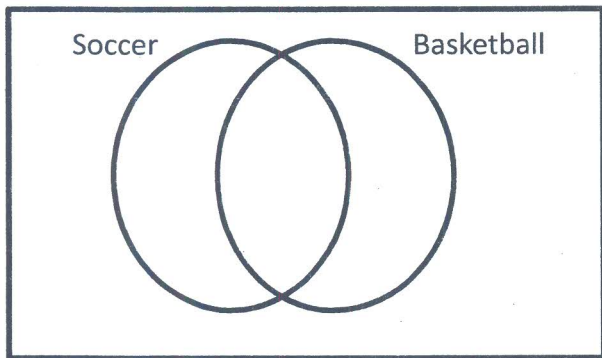
How many students owned...

15. An Xbox \_\_\_\_\_

16. Only a PS3 \_\_\_\_\_

17. Both consoles \_\_\_\_\_

Out of 22 students surveyed, 3 did not like soccer or basketball. 7 said they only like basketball. None said they like both.



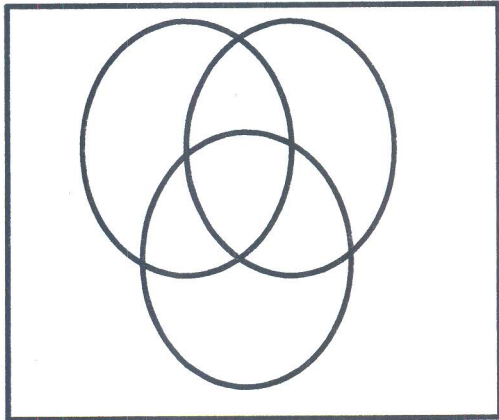
How many students liked...

18) Only soccer \_\_\_\_\_

19) Soccer or basketball \_\_\_\_\_

20) Soccer and basketball \_\_\_\_\_

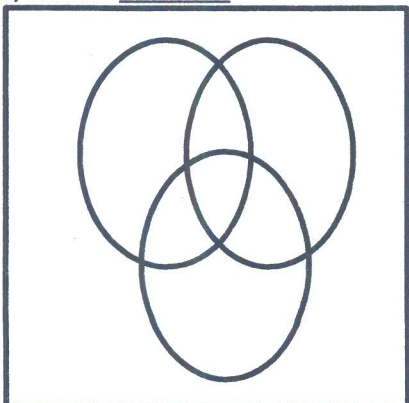
Teresa asked students in her math class whether they owned a dog, cat, or bird. Of the 35 students surveyed, 11 owned a dog, 8 owned a cat, 12 owned a bird. 3 owned a cat and dog. 5 owned a cat and bird and 3 owned a bird and dog. 2 students owned all three animals. How many students owned:



21) Only a dog? \_\_\_\_\_

22) Dog and cat, but not a bird? \_\_\_\_\_

23) None \_\_\_\_\_



Matthew was ordering pizza for his 47 friends. He took a survey to see who like pepperoni, cheese, and sausage. 3 people said they liked all three, 5 said cheese and sausage, 8 said pepperoni and cheese, and 3 said pepperoni and sausage. 5 people did not choose any of the three. 10 total like pepperoni and 14 liked sausage. How many liked:

24) Cheese \_\_\_\_\_

25) Just Cheese \_\_\_\_\_

26) Just sausage \_\_\_\_\_