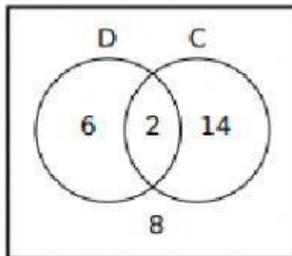


## VENN DIAGRAMS and TWO WAY TABLES

D = Like dogs  
C = Like cats



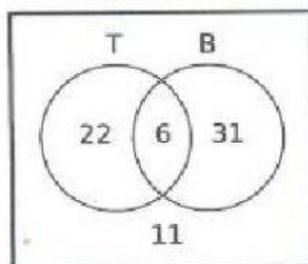
- 6 How many like dogs? 50
- 7 How many like cats?
- 8 How many like both dogs and cats?
- 9 How many don't like dogs or cats?
- 10 How like dogs but not cats?

	Like Cats	Don't Like Cats	TOTAL
Like Dogs			
Don't Like Dogs			
TOTAL			

Use your answers above (Q6 -10) to help you answer these questions.

11. What is the probability that a person chosen likes dogs?
12. What is the probability that a person likes cats?
13. What is the probability that a person likes both dogs and cats?
14. What is the probability that a person does not likes dogs or cats?
15. What is the probability that a person likes dogs but not cats?

T = Play tennis  
B = Play basketball

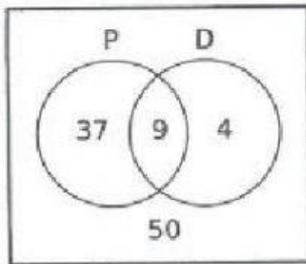


- 11 How many people were surveyed?
- 12 How many play tennis or basketball?
- 13 How many play only tennis?
- 14 How many play only basketball?
- 15 How many play neither sport?

	Like Tennis	Don't Like Tennis	TOTAL
Like Basketball			
Don't Like Basketball			
TOTAL			

- 16. What is the probability that a person plays Tennis or Basketball?
- 17. What is the probability that a person plays only Tennis?
- 18. What is the probability that a person plays only Basketball?
- 19. What is the probability that a person plays no sport?

P = Pianist  
D = Dancer



- 21. How many were surveyed?
- 22. How many play piano?
- 23. How many dance but don't play piano?
- 24. How don't dance?
- 25. How many don't play piano & don't dance?

	Is a Pianist	Is not a Pianist	TOTAL
Is a Dancer			
Is not a Dancer			
TOTAL			

- 26. What is the probability that a person plays the piano?
- 27. What is the probability that a person dances but does not play the piano?
- 28. What is the probability that a person does not dance?
- 29. What is the probability that a person does not dance and does not play the piano?

