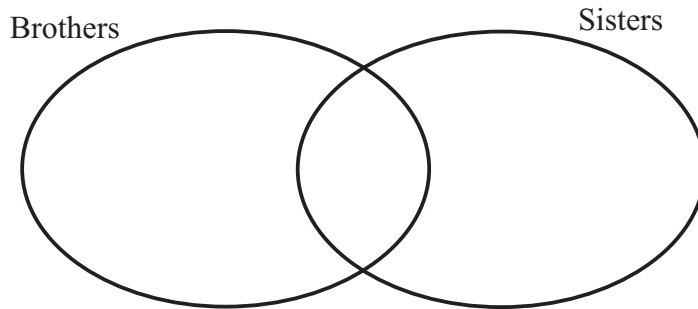


- 1) In a class of 30 students, all of them have brothers or sisters or both.
- 19 have a brother.
- 16 have a sister.
- a) Complete the Venn diagram.



- b) Find the probability that a student in the class has a brother and a sister.
- c) If it is known that a student has a sister, what is the probability that they also have a brother?
- 2) A cafeteria serves only main courses and desserts. Some people just have a main, some have just a dessert and some have both.
- One day, 65% of the customers had a main course and 90% had a dessert.
- a) Show this information on a Venn diagram.
- b) What is the probability that a customer had a main course and a dessert?
- c) If it is known that a customer had a dessert, what is the probability that they also had a main course?