

Venn Diagram - 2 Sets (circles)

Strategy- 1. Determine the number of sets, place that number of circles in the Universal set and label. 2. Place the total number in the Universal set, 3. Determine if you know any intersections and place those numbers in that intersection. 4. Other numbers should go on the line of the circle until you can determine by adding or subtracting where those numbers should go

1. In a class of students, 18 students play football, 12 students play basketball and 5 played both. 3 students didn't play either. How many students were in the class?
2. A survey was conducted among 100 people to determine their favorite fruits. 50 people preferred apples and 60 people preferred bananas. If 30 people preferred both apples and bananas, how many people preferred neither?
3. In a group of 80 people, 50 people like dogs and 30 people like cats. If 20 people like both dogs and cats, how many people like only dogs?
4. In a school of 500 students, 300 students play a musical instrument and 200 students play a sport. If 100 students play both a musical instrument and a sport, how many students don't participate in either activity?
5. In a group of 90 people, 50 people speak Spanish and 40 people speak French. If 20 people speak both Spanish and French, how many people speak only one of the two languages?
6. In a survey of 100 people, 60 like pizza, 50 like burgers, and 30 like both. How many people like either pizza or burgers but not both?
7. A group of 50 students is surveyed, and it is found that 30 like sports, 20 like music, and 10 like both. What is the size of the set of students who do not like either sports or music?
8. A grocery store has 100 employees. 60 of them are cashiers, and 40 of them are stockers. If 20 of the employees are both cashiers and stockers, how many employees work in the store but do not work as cashiers or stockers?