



IIT Foundation Work Sheet

Topic: Sets

Instructions:

1. Immediately fill your particulars by using a Blue/Black Pen Only.
2. There is only one correct answer for each question. Fill the bubble on the OMR to mark your answer.
3. Working should be done only in the space provided.
4. Don't fold or make any stray marks on the Answer Sheet.

Name: _____ Section: _____ Roll No: _____ School Id _____

1. Of the number of three athletic teams in a school, 21 are in the basketball team, 26 in hockey team and 29 in the football team. 14 play hockey and basketball, 15 play hockey and football, 12 play football and basketball and 8 play all the games. How many members are there in all?
(1) 41 (2) 42 (3) 43 (4) 44
2. Each student in a class of 40, studies at least one of the subjects, English, Math and Economics, 16 study English, 22 Economics and 26 Math, 5 study English and Economics, 14 Mathematics and Economics and 2 English, Economics and Math. Find the number of students who study English and Math & English, Math but not Economics.
(1) 7 & 5 (2) 9 & 5 (3) 5 & 7 (4) 3 & 7
3. In a class of 60 students, 23 play Hockey, 15 play Basketball and 20 play Cricket. 7 play Hockey and Basketball, 5 play Cricket and Basketball, 4 play Hockey and Cricket and 15 students do not play any of the these games. Find how many play Hockey, Basketball and Cricket?
(1) 3 (2) 19 (3) 1 (4) 5
4. In a class of 60 students, 23 play Hockey, 15 play Basketball and 20 play Cricket. 7 play Hockey and Basketball, 5 play Cricket and Basketball, 4 play Hockey and Cricket and 15 students do not play any of the these games. Find how many play Hockey but not Cricket?
(1) 3 (2) 19 (3) 1 (4) 5
5. In a class of 60 students, 23 play Hockey, 15 play Basketball and 20 play Cricket. 7 play Hockey and Basketball, 5 play Cricket and Basketball, 4 play Hockey and Cricket and 15 students do not play any of the these games. Find how many play Hockey and Cricket but not Basketball?
(1) 3 (2) 19 (3) 1 (4) 5
6. In a town of 10,000 families, it was found that 40% families buy newspaper A, 20 % families buy newspaper B and 10% families buy newspaper C. 5% families buy A and B, 3% buy B and C and 4% buy A and C. If 2% families buy all the newspapers, find the number of families which buy only A.
(1) 1300 (2) 2300 (3) 3300 (4) 4300
7. In a group of 100 persons, liking at least one of tea, coffee, ice – cream, 49 like tea, 41 like coffee, 62 like ice – cream, 25 persons like tea and coffee both , 18 persons like coffee and ice – cream both 17 persons like both tea and ice – cream. Find the number of persons who like all the three items.
(1) 6 (2) 7 (3) 8 (4) 9
8. In a survey it was found that 21 people like product A, 26 liked product B and 29 liked products C. If 14 people liked products A and B, 12 people like product C and A, 14 people liked products B and C and 8 liked all the three products. Find how many liked product C only?
(1) 8 (2) 9 (3) 10 (4) 11
9. A survey of 500 television viewers produced the following information, 285 watch football, 195 watch hockey, 115 watch basketball, 45 watch football and basketball, 70 watch football and hockey, 50 watch hockey and basketball, 50 do not watch any of three games. How many watch all the three games?
(1) 10 (2) 20 (3) 30 (4) 40
10. A survey of 500 television viewers produced the following information, 285 watch football, 195 watch hockey, 115 watch basketball, 45 watch football and basketball, 70 watch football and hockey, 50 watch hockey and basketball, 50 do not watch any of three games. How many watch exactly one game?
(1) 125 (2) 225 (3) 325 (4) 425

OMR (Use HB Pencil Only)

1	① ② ③ ④	2	① ② ③ ④	3	① ② ③ ④	4	① ② ③ ④	5	① ② ③ ④
6	① ② ③ ④	7	① ② ③ ④	8	① ② ③ ④	9	① ② ③ ④	10	① ② ③ ④