

SETS

CANSU OLCE

A STAR MATHS (www.astarmaths.com.au)

1. There are 45 students in a class. 15 students are successful in maths and 13 students are not successful in science. 6 students are not successful in maths and science. How many students are successful in only science?
2. There are 14 students who can speak either English or German. There are 21 students who can speak at least one language and 27 students who can at most one language. How many students cannot speak any of the languages?
3. There are students who can play football and volleyball. Every student who can play volleyball can also play football. There are 9 students who can play at least one sport. There are 14 students who can play one sport the most. Summation of the students who play volleyball and the students who don't play football is 13. How many students are there in total?
4. There are 20 students who can play football and 24 students who can play basketball. If there are 38 students who play football or basketball, how many students are there who can play both games?
5. There are 12 students who can play football and 18 students who can play basketball. If the number of students who can play both and the number of students who can play none are same. How many students are there in total?
6. There are 12 students who passed mathematics and 15 students who failed in science. If there are 5 students who failed in mathematics and science. How many students passed both?
7. There are students who play football or basketball or volleyball. The students play only one of them at most. There are no students who play none. There are 11 students who don't play football, 12 students who don't play basketball and 13 students who don't play volleyball. How many students are there in total?

8. There are 38 students in a class. The students can speak at least one of languages; English, German and French. 21 students can speak English. 20 students can speak German. 19 students can speak French. 8 students can speak both English and German. 10 students can speak both English and French. If there are 3 students who can speak three languages. How many students can speak German and also French?
9. There are students who pass Turkish and Maths. Every student passes at least one of the subjects. 60% of the students pass maths and 70% of the students pass Turkish. If there are 20 students who pass only Turkish. How many students are there who pass both subject?
10. There are 20 students who can speak at least two languages and there are 12 students who can speak at most two languages. If there are 7 students who can speak two languages, find the number of students in the class.
11. There are 37 students in a class. Everybody who can speak English can also speak French. There are 7 students who can speak both languages. The amount of people who can speak French are 5 times of the amount of people who can speak English. How many of the students can speak only French?
12. There are 30 students in a class. Every student can speak at least one of the languages; Turkish, German and French. There are 21 students who can speak at most two languages. How many students can speak 3 languages?
13. There are 40 students in a class. There are 16 female students and 10 of the female students wear glasses. There are 18 females without glasses. Find the percentage of the male students to the whole class?
14. Students who can speak English can also speak German. There are no students who can speak English and French. 5 students can speak English. 9 students can speak German. 15 student can speak French. How many students more can speak French than German?

15. Everybody in a class can speak at least one language. People who speak English can also speak German. There are 9 students who cannot speak French. 13 students can speak German. If only 1 person can speak all 3 languages, find the number of students who can speak French and German.
16. There are 33 people in a group. 20 people play football and 18 people play basketball. The summation of the number of students who play both and the number students who play none is 11. Find the number of the students who play both?
17. There are 25 students in a class. 7 of them can speak English. 6 students can speak German. 3 students can speak both. How many students are there who can speak none?
18. $\frac{2}{5}$ of the students in a class speak English. $\frac{3}{10}$ of the students speak French. $\frac{1}{10}$ of the students speak both. If there are 20 students who speak none, find the number of students who speak only English.
19. There are 24 students in a class. The number of students who failed mathematics and passed Physics is 5. The number of students who passed mathematics is 5. How many students failed both?
20. There are students which can speak at least one languages; German, English and French. The number of students who can speak German but not French is 8. The number of students who can speak French but not English is 11. The number of students who can speak English but not German is 6. If there are 5 students who can speak all three languages, find the number of students in this class.

ANSWERS

1. 24

2. 34

3. 18

4. 6

5. 30

6. 2

7. 18

8. 7

9. 15

10. 25

11. 24

12. 9

13. 30

14. 11

15. 4

16. 8

17. 15

18. 15

19. 14

20. 30

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