



## Probability Union, Intersection, Complement - Word Problem Counts and Percents to Percent

1

In a group of 20 students, 16 are in the French group but not the music group, 5% are in the music group but not the French group, and 1 are in neither group.

What percent of the students are in the French group?

A	90%	B	80%
C	75%	D	100%

2

In a group of 100 library books, 7% are in the mystery group but not the available group, 21 are in the available group but not the mystery group, and 64% are in neither group.

What percent of the library books are in the mystery group?

A	15%	B	23%
C	6%	D	7%

3

In a group of 100 households, 7% have internet, 2 have both, and 58 are in neither group.

What percent of the households are in the internet group but not the streaming group?

A	9%	B	2%
C	20%	D	5%
E	7%		

4

In a group of 25 students, 72% ride a bicycle, 5 ride both, and 4% are in the skateboard group but not the bike group.

What percent of the students are in the skateboard group?

A	24%	B	36%
C	4%	D	44%

5

In a group of 50 students, 9 are in the bike group but not the skateboard group, 58% are in the skateboard group but not the bike group, and 6% are in neither group.

What percent of the students are in both groups?

A	12%	B	22%
C	18%	D	58%

6

In a group of 25 students, 40% run track, 5 do both, and 32% are in the swimming group but not the track group.

What percent of the students are in the swimming group?

A	32%	B	52%
C	72%	D	49%

7

In a group of 25 shoppers, 4 bought both, 76% are in the fruit group but not the veg group, and 4% are in the veg group but not the fruit group.

What percent of the shoppers are in at least one of the two groups?

A	112%	B	97%
C	128%	D	84%
E	96%		

8

In a group of 25 students, 64% have a part-time job, 4 do both, and 3 are in the sport group but not the job group.

What percent of the students are in neither group?

A	8%	B	21%
C	24%	D	25%