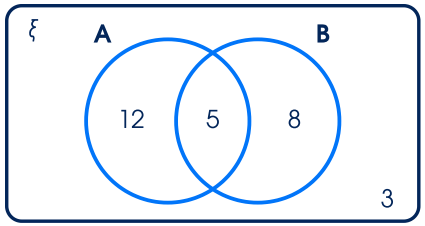
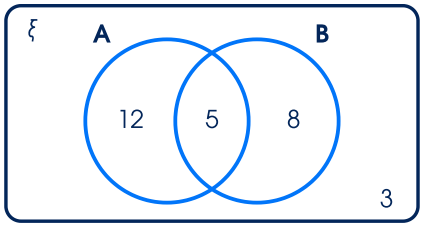
GCSE HIGHER · REVISION MAT 1

Venn diagrams and two-way tables

1 How many are in set A?

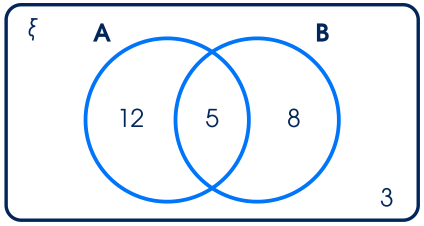


2 Find P(A ∩ B).



3 Explain what A ∪ B means.

Find n(A ∪ B).



4 50 students: 28 study French, 19 study Spanish and 7 study both.

How many study neither?

5 Show that 12 girls have school lunch.

	School	Packed	Home	Total
Boys	14	9		30
Girls		11	5	28
Total	26		12	58

6 One student is chosen at random.

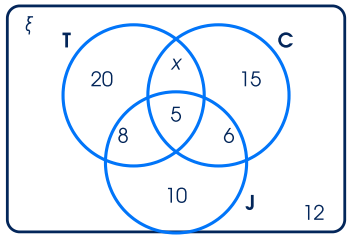
Find P(packed lunch).

	School	Packed	Home	Total
Boys	14	9		30
Girls		11	5	28
Total	26		12	58

7 ξ = {1, 2, ..., 12}, A = multiples of 3, B = even numbers.

Show that A ∩ B = {6, 12}.

8 100 people were asked which of tea (T), coffee (C) and juice (J) they like.



Find

P(a person likes exactly two drinks).

ANSWERS · REVISION MAT 1

Venn diagrams and two-way tables

1 12 + 5

17

2 Total 28

$\frac{5}{28}$

3 A ∪ B: in A or B or both.

12 + 5 + 8 = 25

4 28 + 19 − 7 = 40

10

5 **26 − 14 = 12**

6 Packed total 9 + 11 = 20

$\frac{20}{58} = \frac{10}{29}$

7 A = {3, 6, 9, 12},
B = {2, 4, 6, 8, 10, 12}

A ∩ B = {6, 12}

8 x = 100 − 76 = 24

24 + 8 + 6 = 38

0.38

Mr&Mrs MATHS