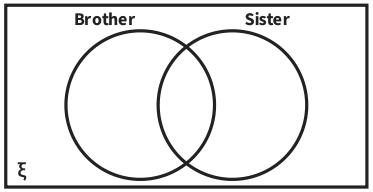
Completing Venn Diagrams

1

32 students were asked about their families. 19 have a brother, 14 have a sister and 6 have both. Complete the Venn diagram.



both ☐

brother only ☐ − ☐ = ☐

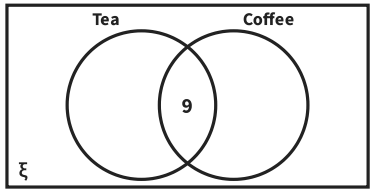
sister only ☐ − ☐ = ☐

neither ☐ − ☐ = ☐

Check _____

2

45 people were asked about hot drinks. 26 drink tea, 21 drink coffee and 9 drink both. Complete the Venn diagram.



both 9

tea only ☐ − ☐ = ☐

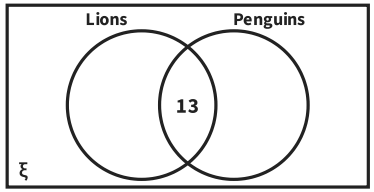
coffee only ☐ − ☐ = ☐

neither ☐ − ☐ = ☐

Check _____

3

50 visitors went to a zoo. 31 saw the lions, 24 saw the penguins and 13 saw both. Complete the Venn diagram.



both 13

lions only ☐ − ☐ = ☐

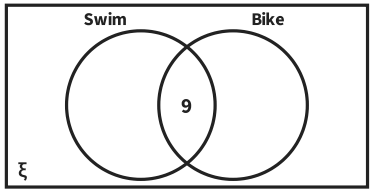
penguins only ☐ − ☐ = ☐

neither ☐ − ☐ = ☐

Check _____

4

36 children were asked what they can do. 22 can swim, 17 can ride a bike and 9 can do both. Complete the Venn diagram.



both 9

swim only ☐ − ☐ = ☐

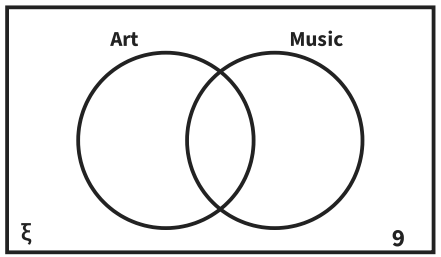
bike only ☐ − ☐ = ☐

neither ☐ − ☐ = ☐

Check _____

5

48 students choose their options. 30 take art, 23 take music and 9 take neither. Complete the Venn diagram.



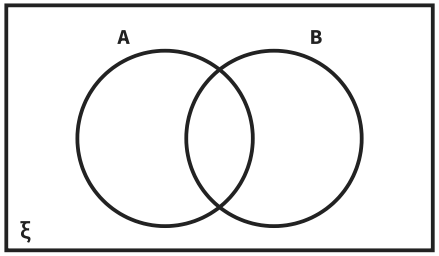
_____

_____

Check _____

6

ξ = 40 people. A = people who own a bike. B = people who own a car. 15 own a bike, 28 own a car and 7 own both. Complete the Venn diagram. How many people are in A ∪ B?

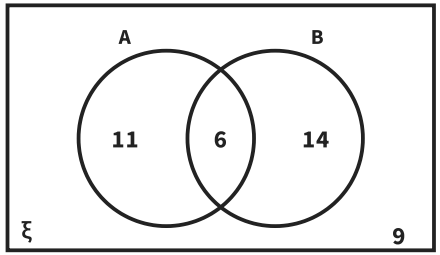


_____

A ∪ B _____

7

The Venn diagram shows how many are in each region. How many are in A ∩ B? How many are in A′?

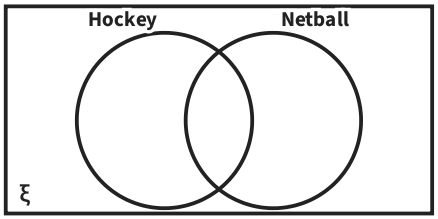


A ∩ B _____

A′ _____

8

30 students: 17 play hockey, 16 play netball and 8 play both. Sam writes 17, 8 and 16 in the circles. Explain Sam's mistake. Then complete the Venn diagram.



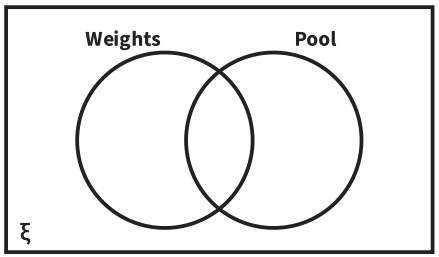
_____

Mistake _____

Completing Venn Diagrams *further practice*

9

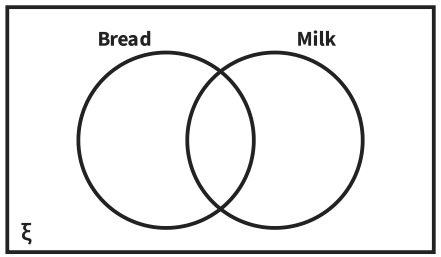
60 members of a gym were asked what they use. 38 use the weights, 33 use the pool and 6 use neither.
Complete the Venn diagram.



Check _____

10

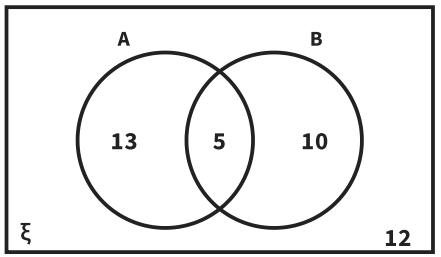
50 shoppers: 18 bought only bread, 12 bought bread and milk, and 29 bought milk. Complete the Venn diagram.



Check _____

11

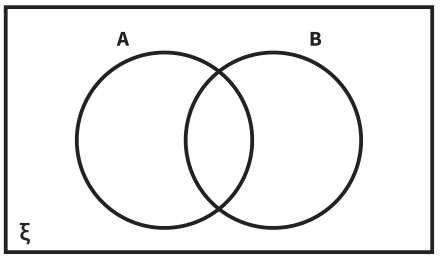
The Venn diagram shows how many are in each region. How many are in B′?



B′ _____

12

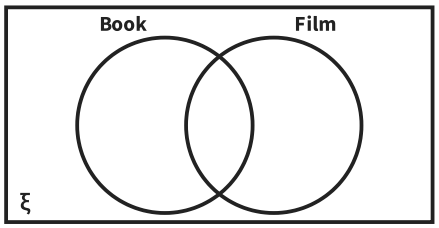
ξ = 45 people. 27 are in A ∪ B. 12 are in A only and 9 are in B only.
Complete the Venn diagram.



Check _____

13

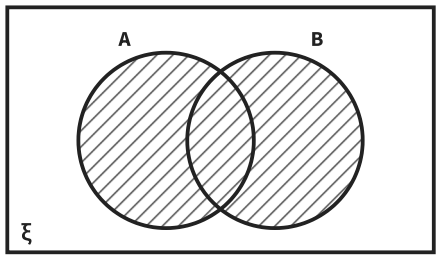
120 people were asked about a story. 64 have read the book, 71 have seen the film and 18 have done neither.
How many have read the book and seen the film?



Answer _____

14

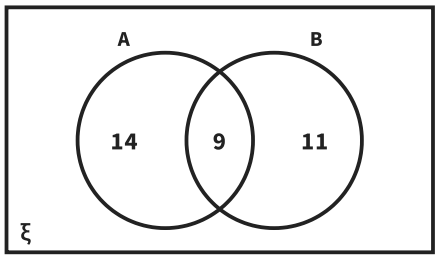
Write the shaded region in set notation.



Answer _____

15

In a Venn diagram, 14 are in A only, 9 are in A ∩ B and 11 are in B only. There are 23 in A′.
How many are in ξ altogether?



Answer _____

16

A club has 40 members. 23 play chess and 21 play draughts. Lucy says at least 4 members must play both.
Is Lucy right? Explain.

Answer _____