

Find and understand the intersection of 2 sets

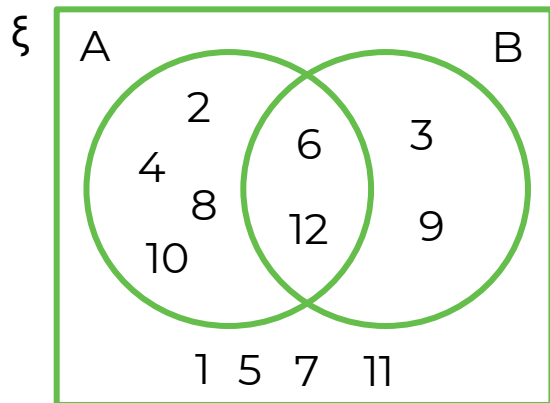
Maths

Mrs Dennett



Find and understand the intersection of 2 sets

1. Here is a Venn diagram.



- List the members of set A
- List the members of set B
- List the members of set $A \cap B$

2. $\xi = \{1, 2, 3, 4, 5, 6\}$

$A = \{\text{Even numbers}\}$

$B = \{\text{Factors of 6}\}$

- Show the information in a Venn diagram.
- List the members of set $A \cap B$

3. What are the elements of $A \cap B$?

$A = \{\text{Even numbers}\}$

$B = \{3, 6, 9, 12, 15, 18, 21, 24\}$



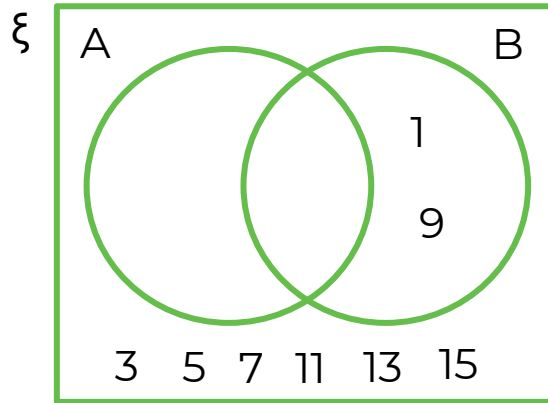
Find and understand the intersection of 2 sets

4. Complete the Venn diagram.

$$\xi = \{1 \text{ to } 16 \text{ inclusive}\}$$

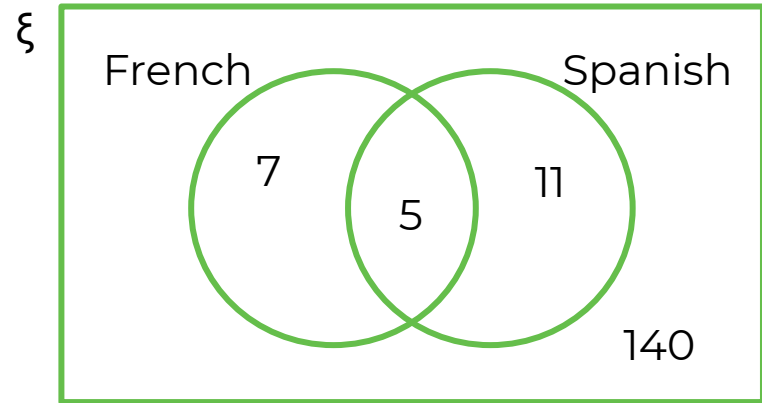
$$A = \{\text{Even numbers}\}$$

$$A \cap B = \{4, 16\}$$



Which group of numbers could set B represent?

5. The diagram shows the number of students in a school who study languages.



- How many students study French?
- How many students study Spanish and French?
- How many students don't study a language?

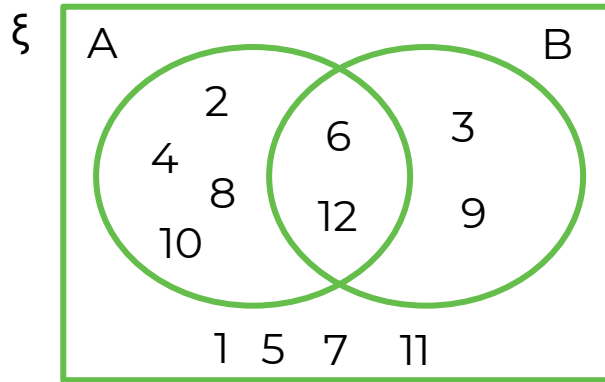


Answers



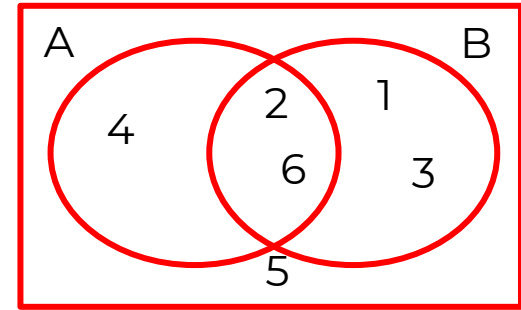
Find and understand the intersection of 2 sets

1. Here is a Venn diagram.



- a) List the members of set A
 $A = \{2, 4, 6, 8, 10, 12\}$
- b) List the members of set B
 $B = \{3, 6, 9, 12\}$
- c) List the members of set $A \cap B$
 $A \cap B = \{6, 12\}$

2. a) Show the information in a Venn diagram. ξ



b) List the members of set $A \cap B$

$\{2, 5\}$

3. What are the elements of $A \cap B$?

$A = \{\text{Even numbers}\} \quad \{6, 12, 18, 24\}$

$B = \{3, 6, 9, 12, 15, 18, 21, 24\}$



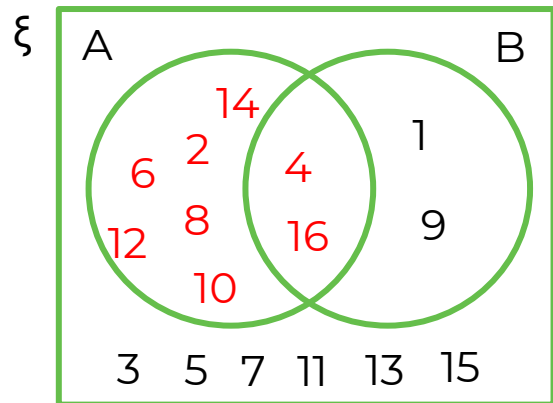
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4. Complete the Venn diagram

$$\xi = \{1 \text{ to } 16 \text{ inclusive}\}$$

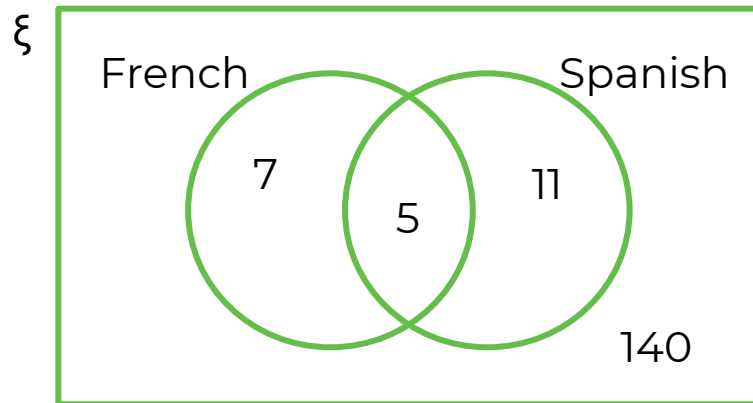
$$A = \{\text{Even numbers}\}$$

$$A \cap B = \{4, 16\}$$



Which group of numbers could set B represent?
Square numbers

5. The diagram shows the number of students in a school who study languages.



- How many students study French? **12**
- How many students study Spanish and French? **5**
- How many students don't study a language? **140**

