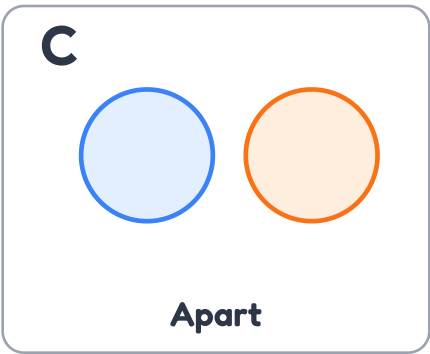
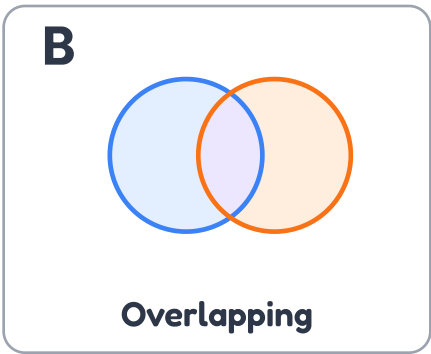
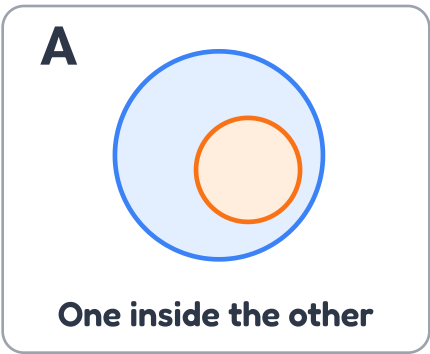


Logical Venn Diagrams

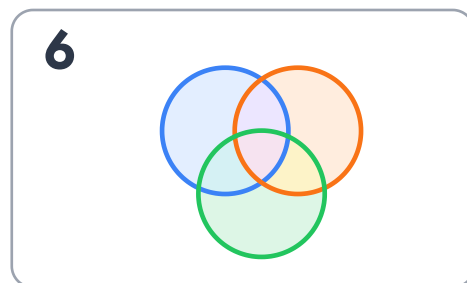
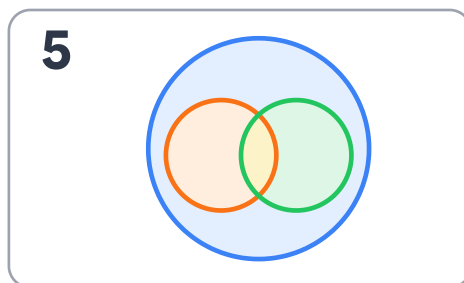
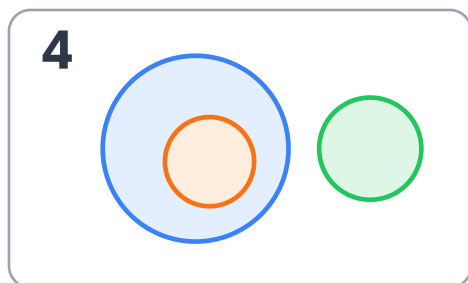
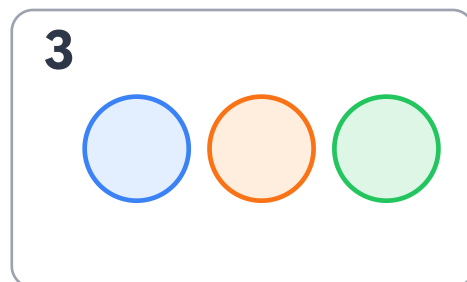
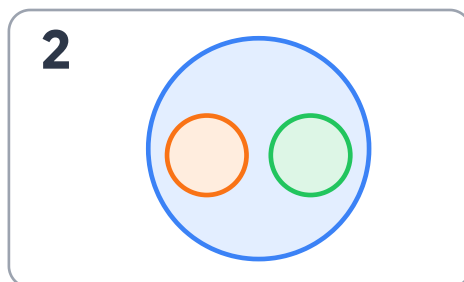
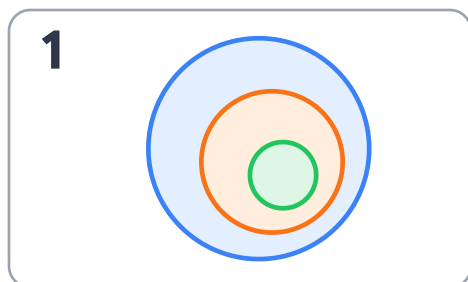
Which diagram shows the two groups? Write A, B, or C.



- | | | | | |
|---------------------------------|--------------------|--------------|---------------------------------------|-------------|
| 1. Animals and Lions | <div>Example</div> | <div>A</div> | 7. Months and Days of the Week | <div></div> |
| 2. Cats and Dogs | <div></div> | | 8. Multiples of 5 and Multiples of 10 | <div></div> |
| 3. Children and Swimmers | <div></div> | | 9. Even Numbers and Numbers Over 10 | <div></div> |
| 4. Shapes and Triangles | <div></div> | | 10. Squares and Circles | <div></div> |
| 5. Even Numbers and Odd Numbers | <div></div> | | 11. Vegetables and Carrots | <div></div> |
| 6. Birds and Things That Fly | <div></div> | | 12. Red Things and Toys | <div></div> |

Logical Venn Diagrams

Which diagram shows the three groups? Write its number.



1. Animals, Birds, Owls

Example

1

2. Animals, Cats, Dogs

3. Cars, Trees, Fish

4. Fruits, Apples, Cars

5. Numbers, Even Numbers, Multiples of 3

6. Kids Who Swim, Kids Who Read, Kids Who Sing

7. Shapes, Triangles, Squares

8. Food, Vegetables, Carrots

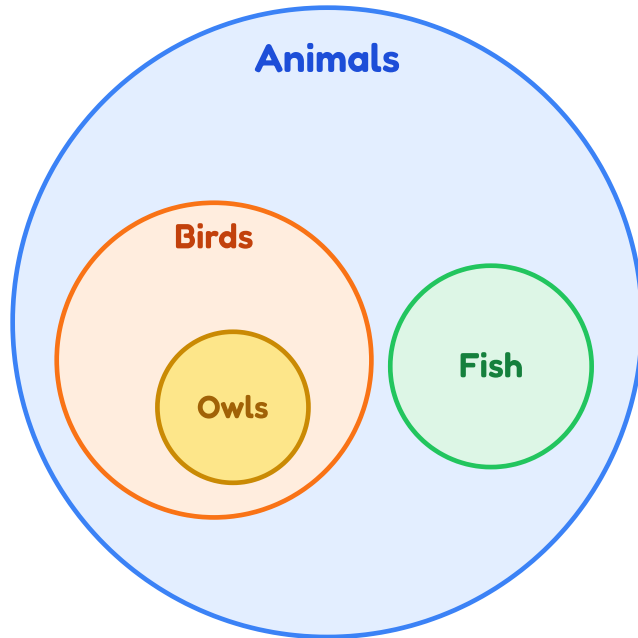
9. Even Numbers, Odd Numbers, Multiples of 10

Logical Venn Diagrams

Use each diagram. Write All, Some, or No.

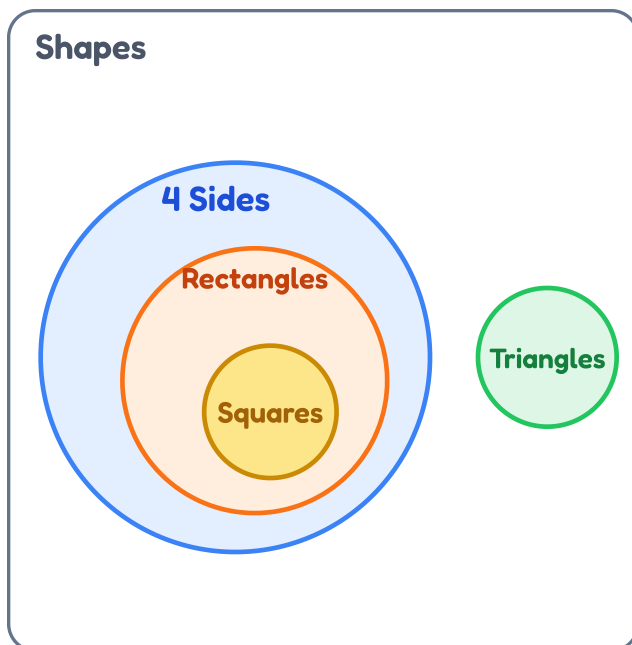
A.

Example



- All** owls are birds.
- birds are owls.
- fish are birds.
- owls are animals.
- animals are fish.
- owls are fish.

B.



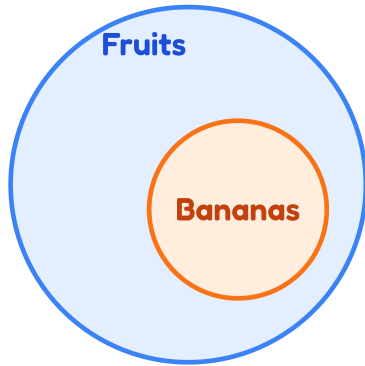
- squares are rectangles.
- rectangles are squares.
- triangles have 4 sides.
- rectangles have 4 sides.
- shapes with 4 sides are squares.
- squares are triangles.

Logical Venn Diagrams

Draw a Venn diagram for each set of groups. Label each circle.

1. Fruits, Bananas

Example



2. Cats, Fish

3. Likes Pizza, Likes Tacos

4. Animals, Birds, Owls

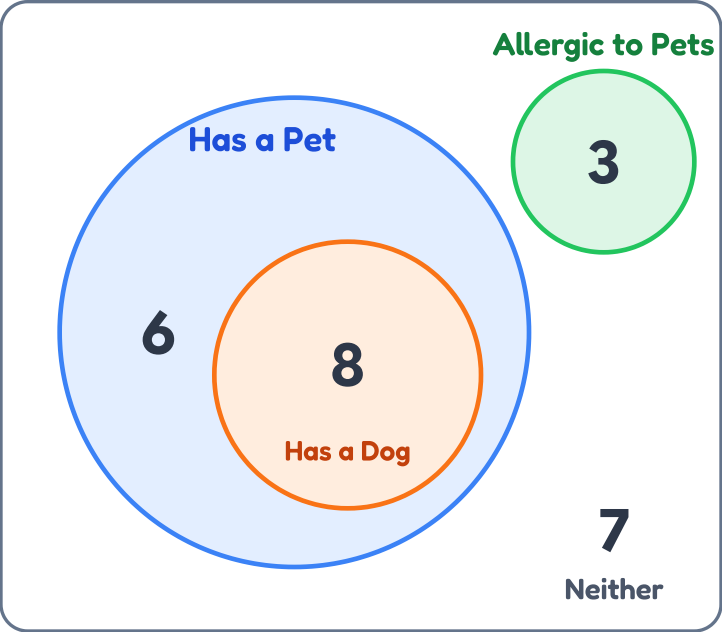
5. Shapes, Circles, Squares

6. Numbers, Even, Over 10

Logical Venn Diagrams

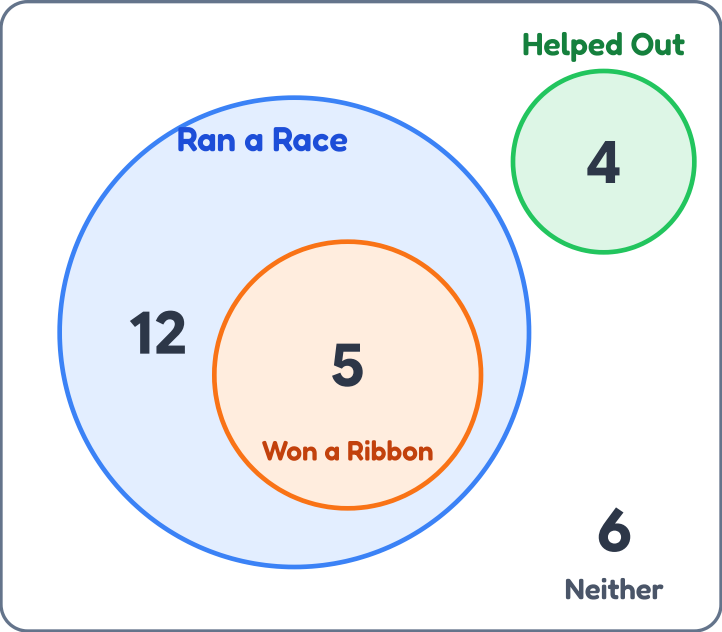
Use each Venn diagram to answer the questions.

A. Pets in Room 12



- 1. How many children have a pet? _____
- 2. How many have a pet but not a dog? _____
- 3. How many children have a dog and are allergic to pets? _____
- 4. How many children are there in all? _____

B. Sports day

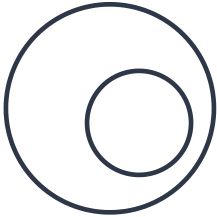


- 1. How many children ran a race? _____
- 2. How many ran but did not win a ribbon? _____
- 3. Did anyone who helped out win a ribbon? _____
- 4. How many children are there in all? _____

Logical Venn Diagrams

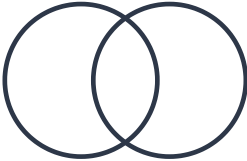
Which diagram shows the two groups? Write A, B, or C.

A



One inside the other

B



Overlapping

C

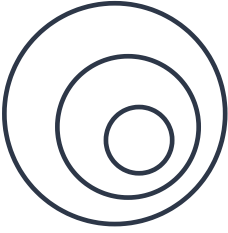
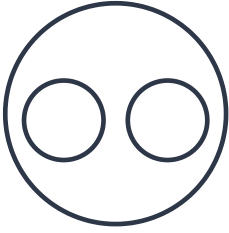
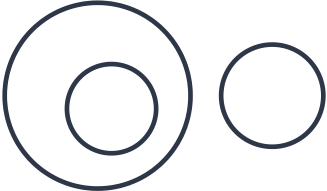
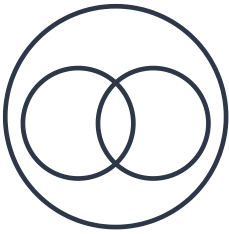
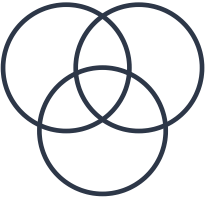


Apart

- | | | | | |
|---------------------------------|--------------------|--------------|---------------------------------------|-------------|
| 1. Animals and Lions | <div>Example</div> | <div>A</div> | 7. Months and Days of the Week | <div></div> |
| 2. Cats and Dogs | <div></div> | | 8. Multiples of 5 and Multiples of 10 | <div></div> |
| 3. Children and Swimmers | <div></div> | | 9. Even Numbers and Numbers Over 10 | <div></div> |
| 4. Shapes and Triangles | <div></div> | | 10. Squares and Circles | <div></div> |
| 5. Even Numbers and Odd Numbers | <div></div> | | 11. Vegetables and Carrots | <div></div> |
| 6. Birds and Things That Fly | <div></div> | | 12. Red Things and Toys | <div></div> |

Logical Venn Diagrams

Which diagram shows the three groups? Write its number.

1		3	
2		4	
5		6	

1. Animals, Birds, Owls

Example

1

2. Animals, Cats, Dogs

3. Cars, Trees, Fish

4. Fruits, Apples, Cars

5. Numbers, Even Numbers, Multiples of 3

6. Kids Who Swim, Kids Who Read, Kids Who Sing

7. Shapes, Triangles, Squares

8. Food, Vegetables, Carrots

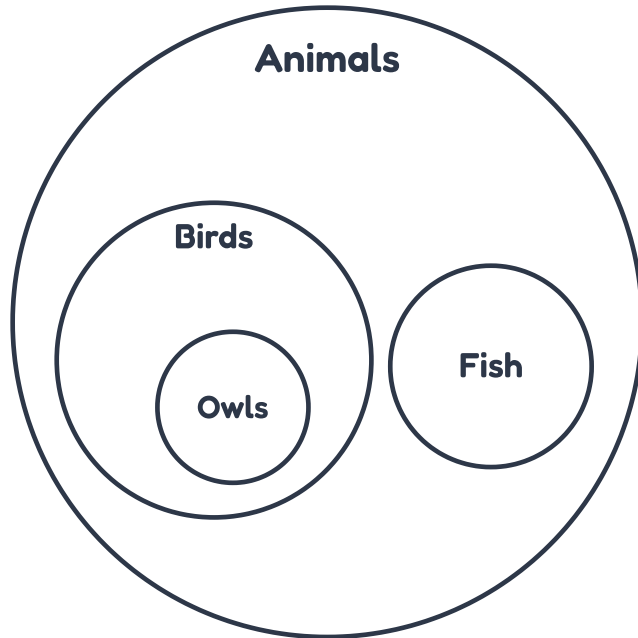
9. Even Numbers, Odd Numbers, Multiples of 10

Logical Venn Diagrams

Use each diagram. Write All, Some, or No.

A.

Example



 All owls are birds.

 birds are owls.

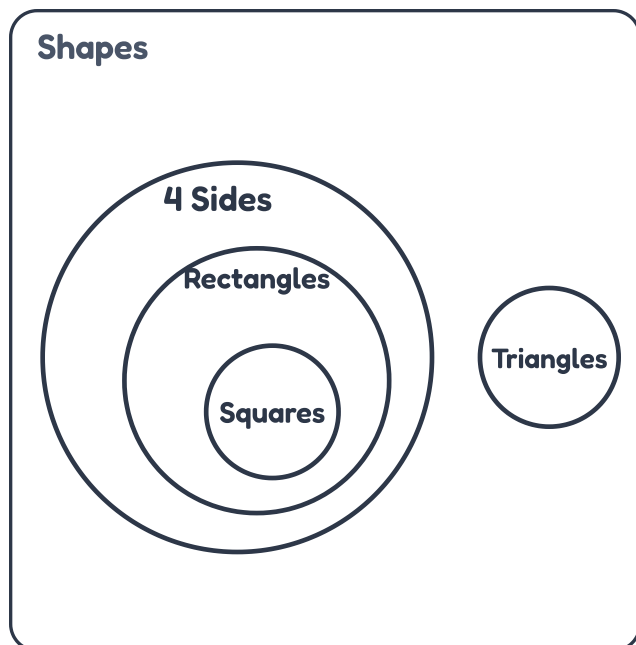
 fish are birds.

 owls are animals.

 animals are fish.

 owls are fish.

B.



 squares are rectangles.

 rectangles are squares.

 triangles have 4 sides.

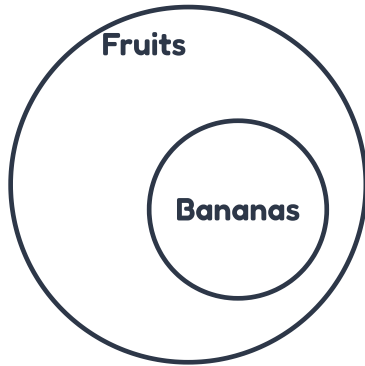
 rectangles have 4 sides.

 shapes with 4 sides are squares.

 squares are triangles.

Logical Venn Diagrams

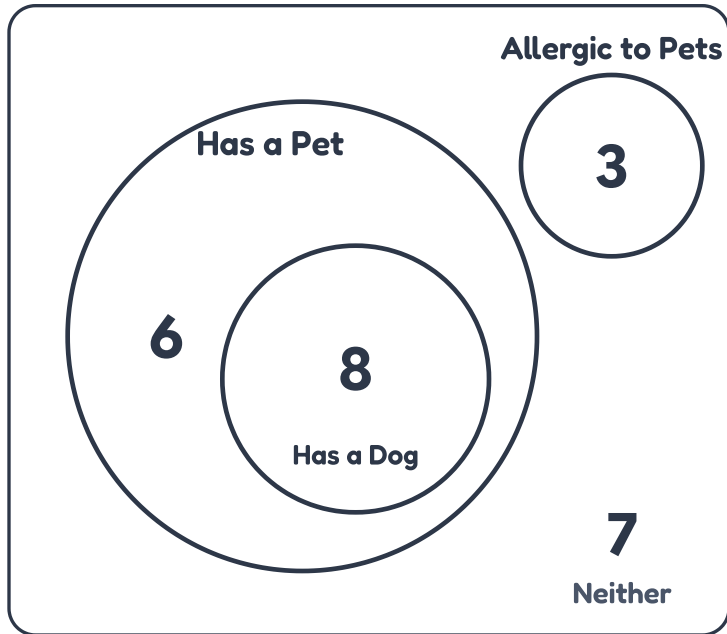
Draw a Venn diagram for each set of groups. Label each circle.

1. Fruits, Bananas**Example****2. Cats, Fish****3. Likes Pizza, Likes Tacos****4. Animals, Birds, Owls****5. Shapes, Circles, Squares****6. Numbers, Even, Over 10**

Logical Venn Diagrams

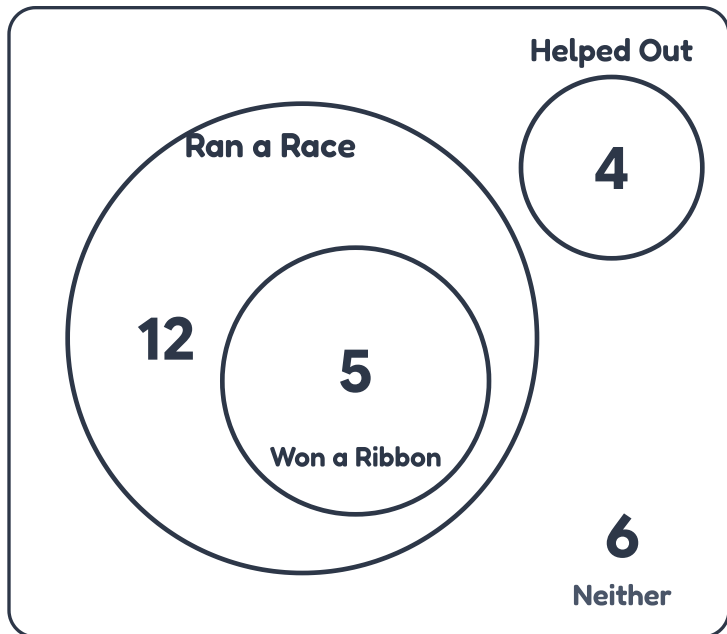
Use each Venn diagram to answer the questions.

A. Pets in Room 12



1. How many children have a pet? _____
2. How many have a pet but not a dog? _____
3. How many children have a dog and are allergic to pets? _____
4. How many children are there in all? _____

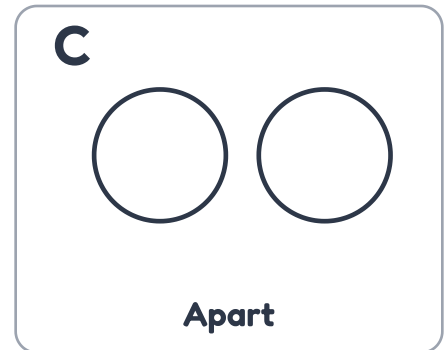
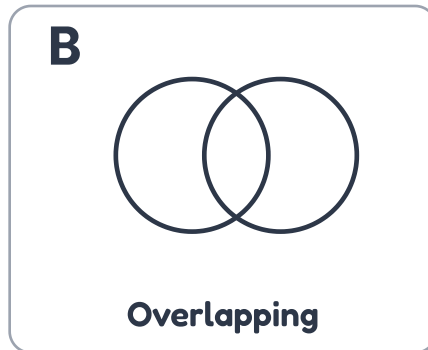
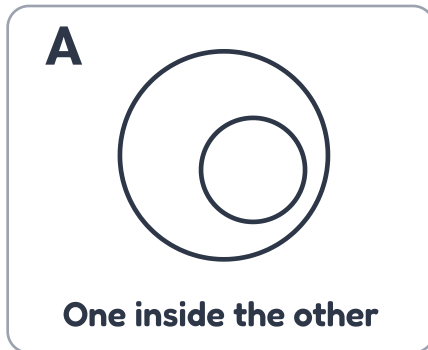
B. Sports day



1. How many children ran a race? _____
2. How many ran but did not win a ribbon? _____
3. Did anyone who helped out win a ribbon? _____
4. How many children are there in all? _____

Logical Venn Diagrams

Which diagram shows the two groups? Write A, B, or C.



1. Animals and Lions

Example

A

7. Months and Days of the Week

C

2. Cats and Dogs

C

8. Multiples of 5 and Multiples of 10

A

3. Children and Swimmers

B

9. Even Numbers and Numbers Over 10

B

4. Shapes and Triangles

A

10. Squares and Circles

C

5. Even Numbers and Odd Numbers

C

11. Vegetables and Carrots

A

6. Birds and Things That Fly

B

12. Red Things and Toys

B

Logical Venn Diagrams

Which diagram shows the three groups? Write its number.

1		3	
4		5	
		6	

1. Animals, Birds, Owls

Example

1

2. Animals, Cats, Dogs

2

3. Cars, Trees, Fish

3

4. Fruits, Apples, Cars

4

5. Numbers, Even Numbers, Multiples of 3

5

6. Kids Who Swim, Kids Who Read, Kids Who Sing

6

7. Shapes, Triangles, Squares

2

8. Food, Vegetables, Carrots

1

9. Even Numbers, Odd Numbers, Multiples of 10

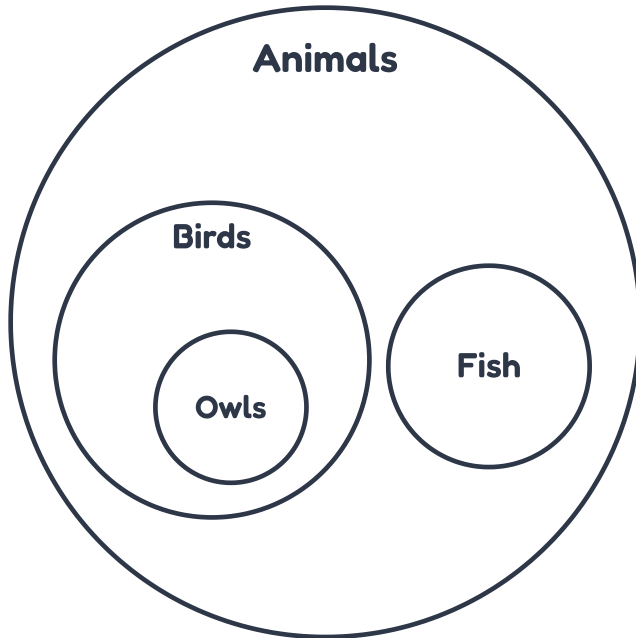
4

Logical Venn Diagrams

Use each diagram. Write All, Some, or No.

A.

Example



All owls are birds.

Some birds are owls.

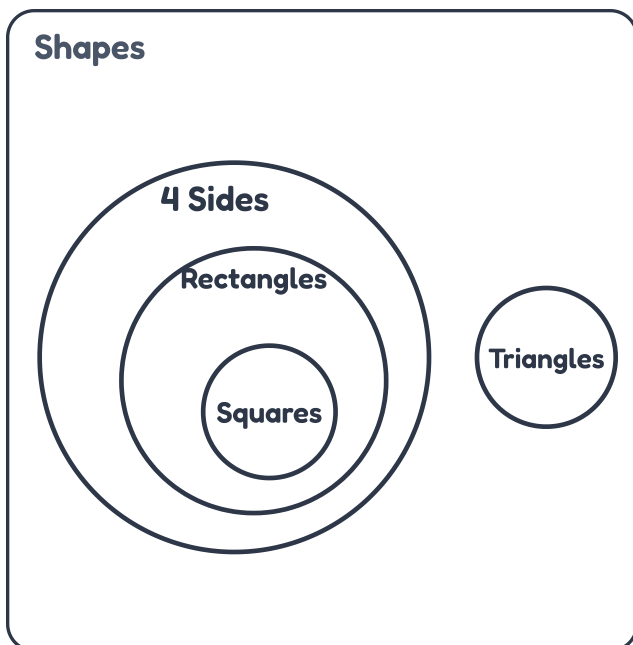
No fish are birds.

All owls are animals.

Some animals are fish.

No owls are fish.

B.



All squares are rectangles.

Some rectangles are squares.

No triangles have 4 sides.

All rectangles have 4 sides.

Some shapes with 4 sides are squares.

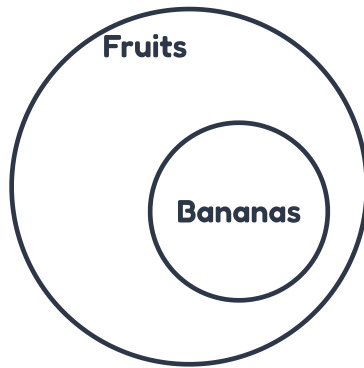
No squares are triangles.

Logical Venn Diagrams

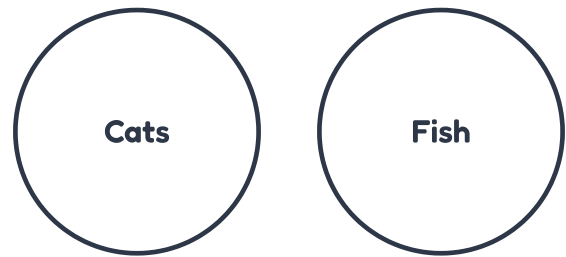
Draw a Venn diagram for each set of groups. Label each circle.

1. Fruits, Bananas

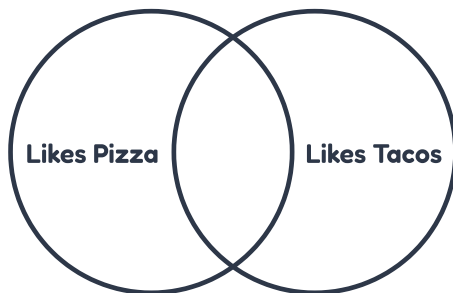
Example



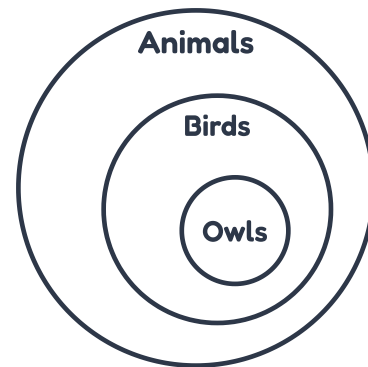
2. Cats, Fish



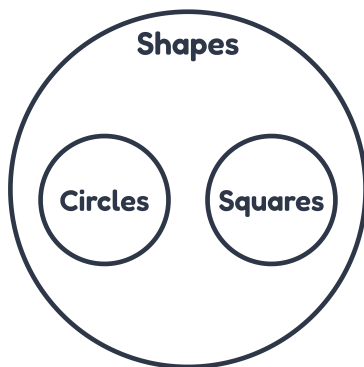
3. Likes Pizza, Likes Tacos



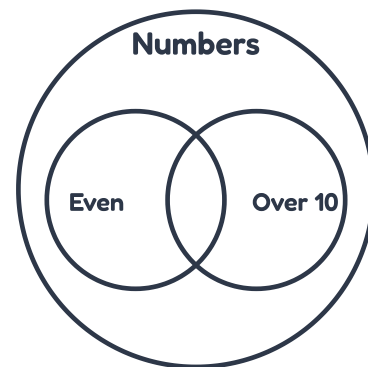
4. Animals, Birds, Owls



5. Shapes, Circles, Squares



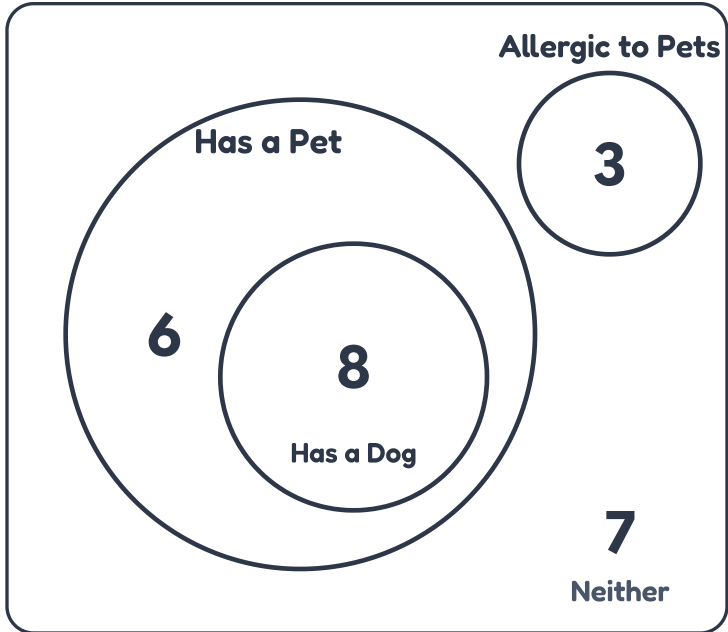
6. Numbers, Even, Over 10



Logical Venn Diagrams

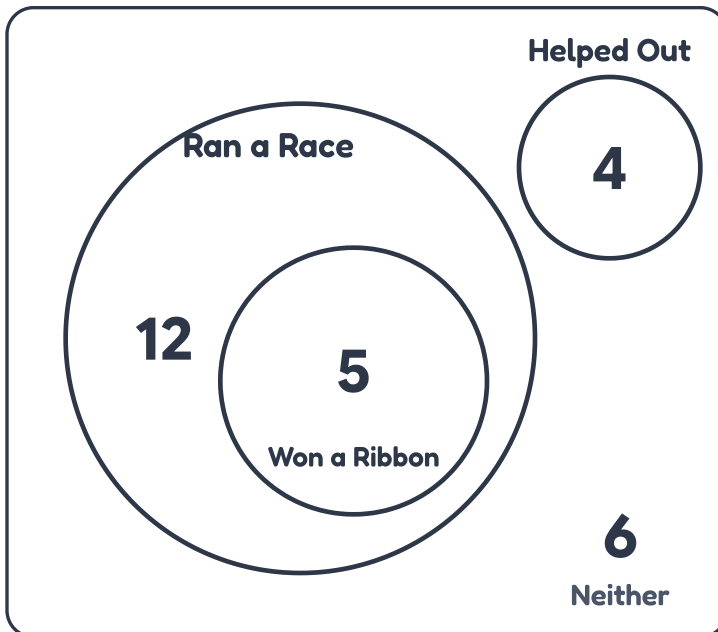
Use each Venn diagram to answer the questions.

A. Pets in Room 12



1. How many children have a pet? 14
2. How many have a pet but not a dog? 6
3. How many children have a dog and are allergic to pets? 0
4. How many children are there in all? 24

B. Sports day



1. How many children ran a race? 17
2. How many ran but did not win a ribbon? 12
3. Did anyone who helped out win a ribbon? No
4. How many children are there in all? 27