Topic: Venn diagrams

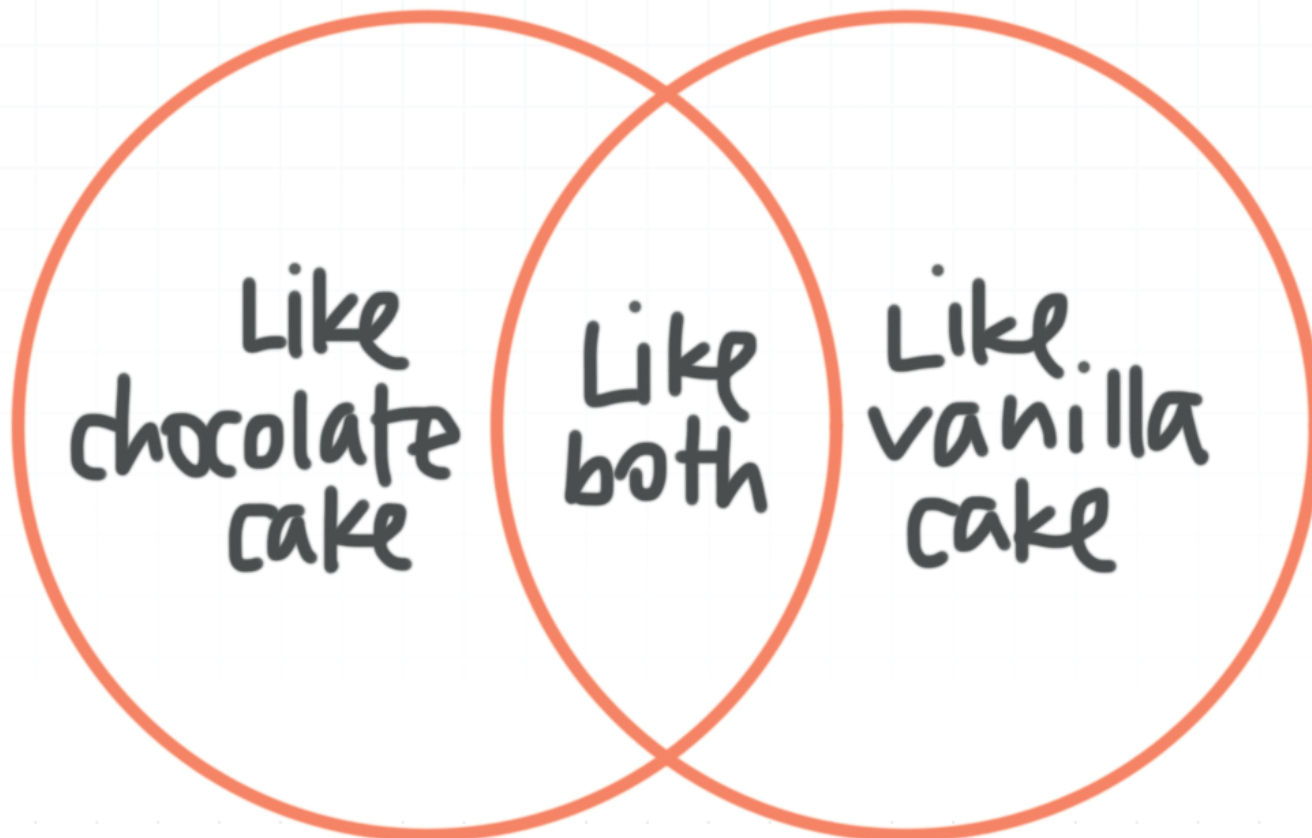**Question**: Which data set could be displayed in a Venn diagram?

Answer choices:

A   The number of students who like chocolate cake, vanilla cake or both.

B   The list of student test scores on the last exam.

C   The data points from a scatterplot.

D   The average height of cat breeds verses the average heights of dog breeds.

Solution: A

Venn diagrams are made with idea of displaying the difference or similarities between data sets, you are looking for the kind of information that could be easily displayed in a two-way table. You can't make a Venn diagram from a list of numbers or from points on a scatterplot because you need to have some categories that you can compare to one another.

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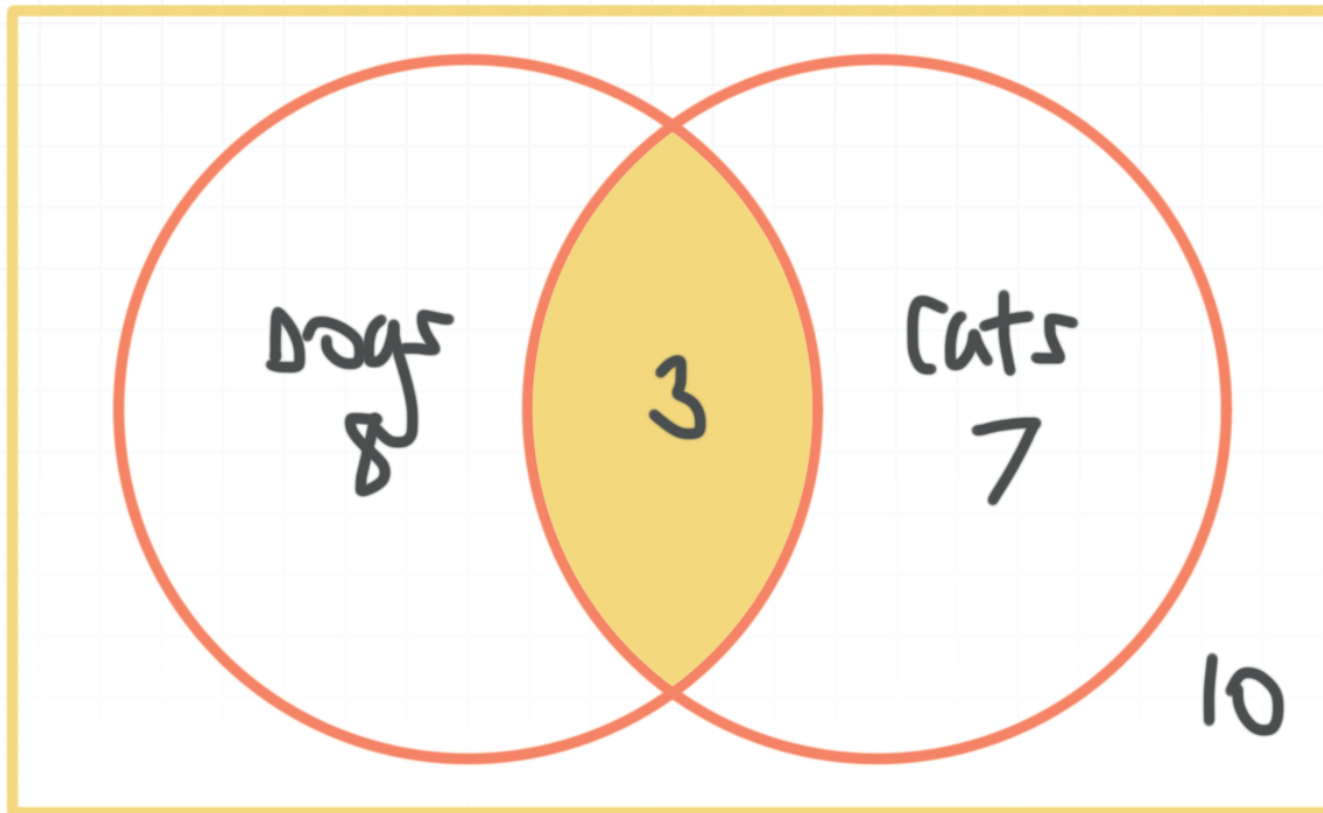**Question**: The Venn diagram shows all the pets that the 3rd graders own. How many 3rd graders own both a cat and a dog?

Answer choices:

A   8
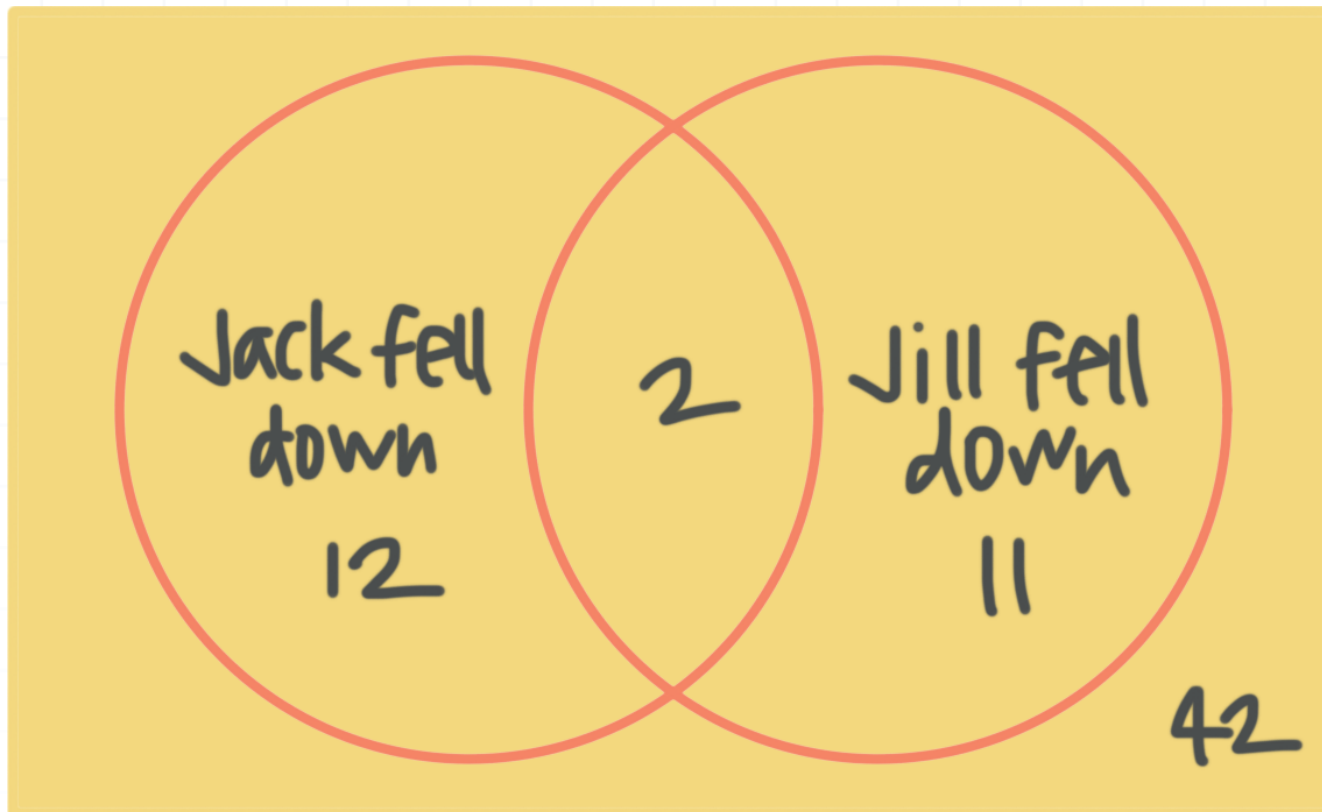
B   3

C   15

D   10

Solution: B

The section in the middle of the Venn diagram is the one that shows the number of 3rd graders who own both a dog and a cat. So there are 3 students who own both a dog and a cat.

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Question: How many times did Jack and Jill not fall down?

Answer choices:

A   12

B   2

C   11

D   42

Solution: D

The number in the Venn diagram that's outside both circles is the number that shows how many times neither Jack nor Jill fell down. Therefore, there were 42 times where neither of them fell.

Jack fell down

12

2

Jill fell down

11

42