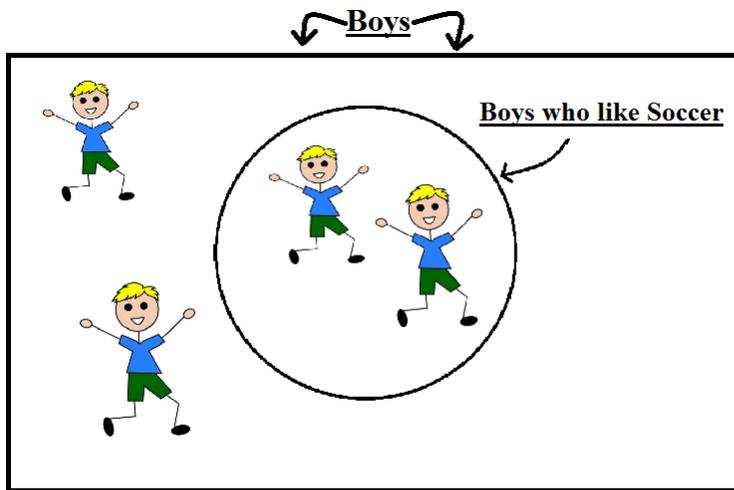


One way to understand what a statement is claiming is by drawing a diagram. For example, look at this statement:

Some boys like soccer.

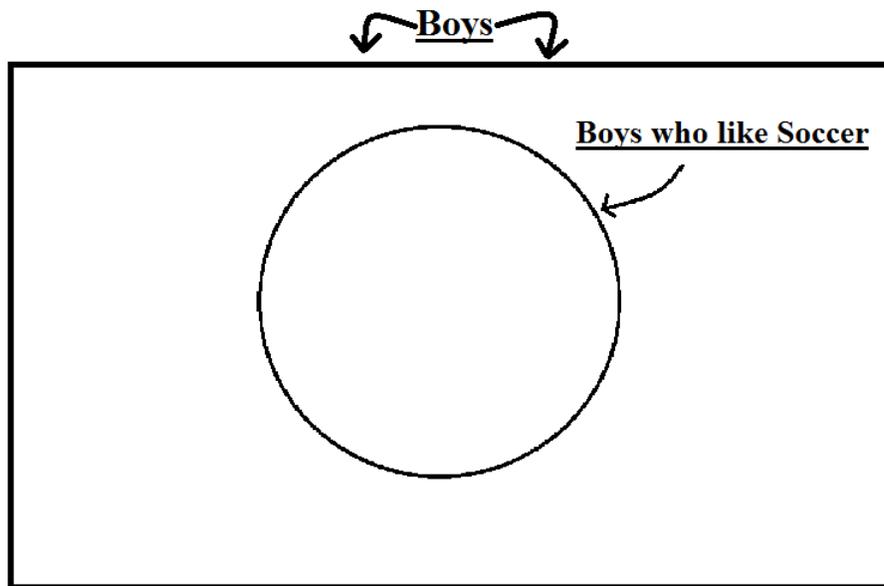
The diagram below is an example of what the statement means:



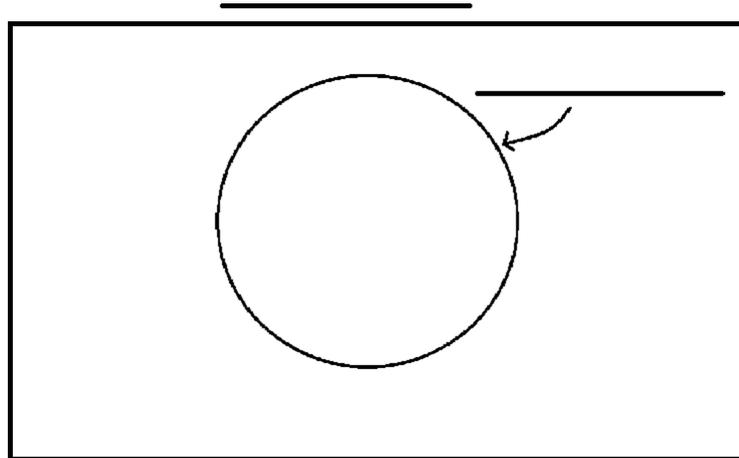
1. What do the boys inside the circle represent?
2. What do the boys outside the circle represent?

3. How would Mr. No respond to the statement, “Some boys like soccer”?

a. Illustrate Mr. No’s response using a diagram:

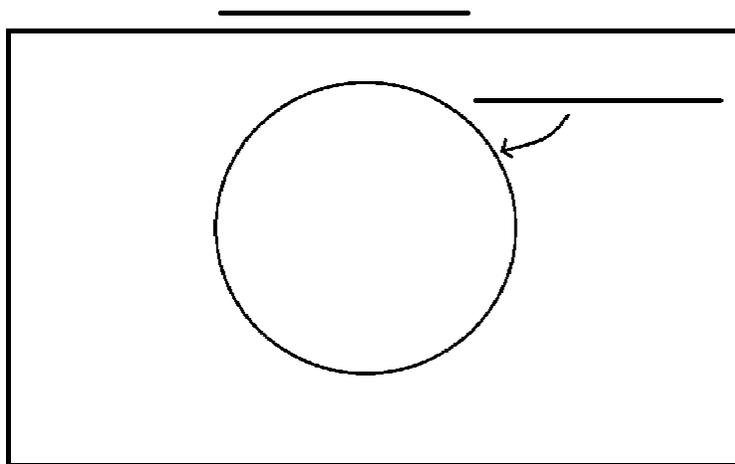


4. Make a diagram for the statement “All monkeys eat bananas”.



5. What would Mr. No's response be to the above statement?

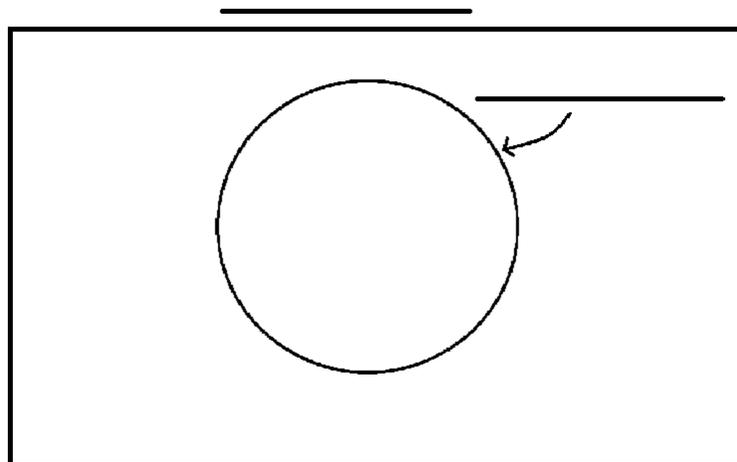
a. Represent Mr. No's response in a diagram:



6. Below, create your own statement:

a. Some

b. Fill in what your statement is claiming by using this diagram:



c. How would Mr. No respond to your statement?

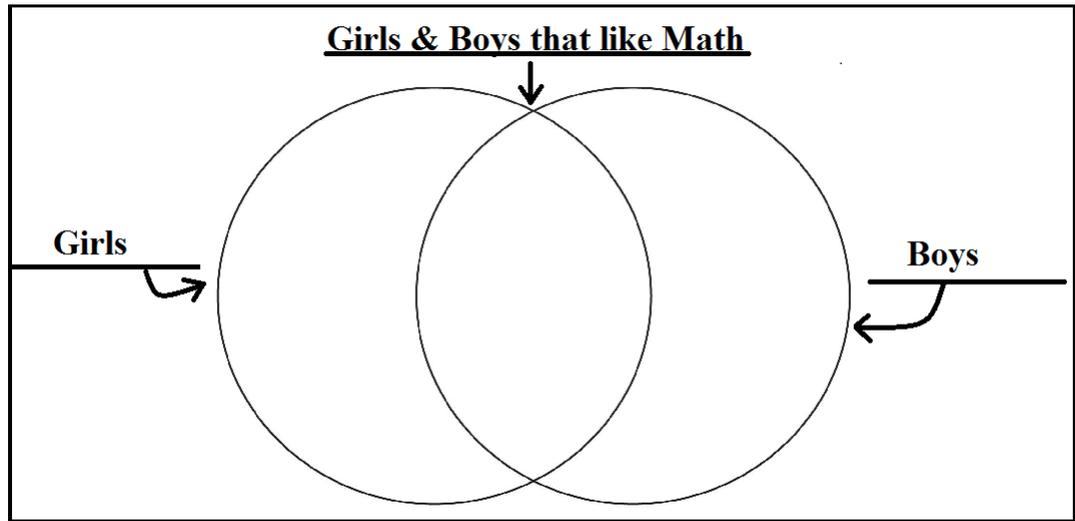
7. Lets look at statements that claim **two** things. For example, look at the statement

Some girls like math AND some boys like math.

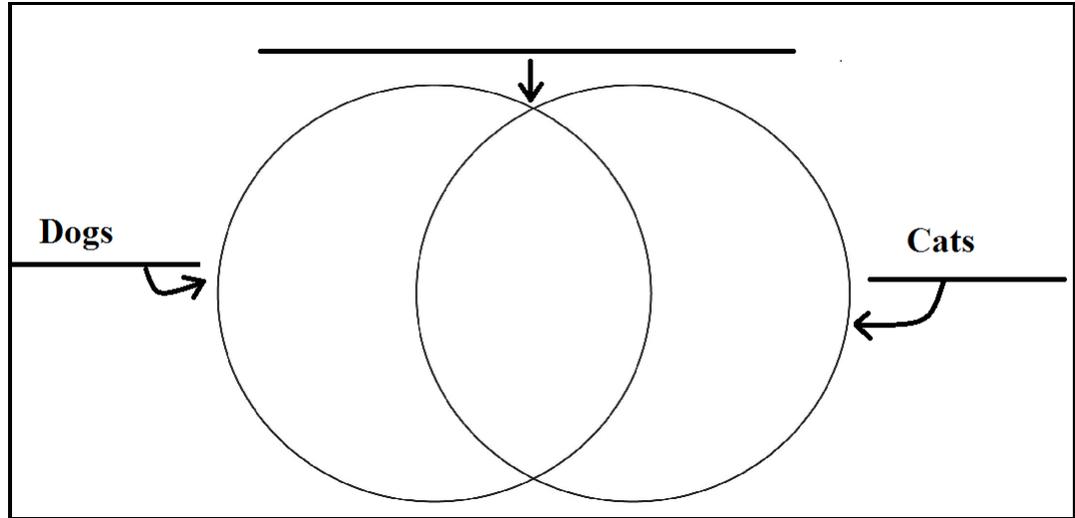
The two claims of the statement are:

- a. Some girls
- AND
- b. Some boys

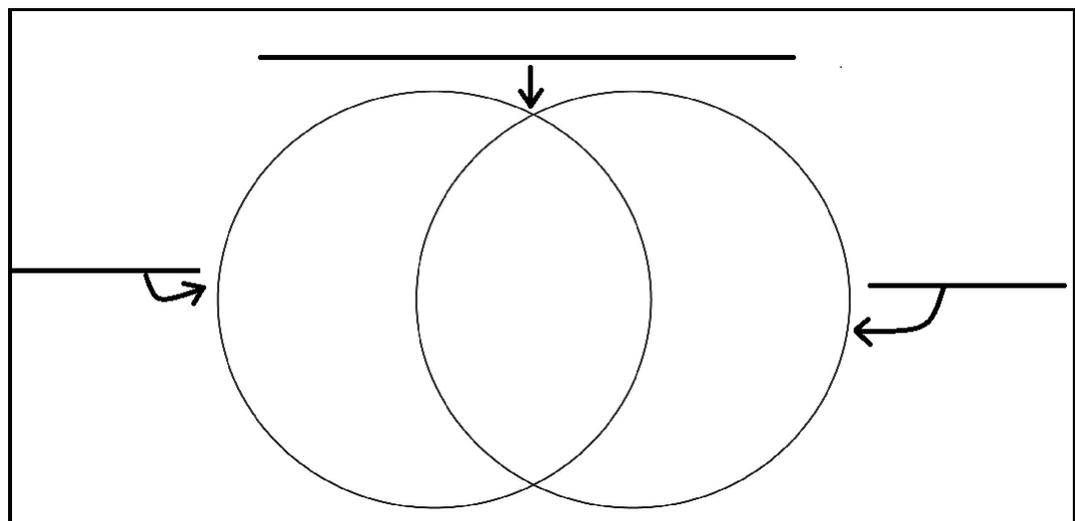
8. In the diagram below, fill in what this statement looks like. Such a diagram is called a **Venn Diagram**.



9. Make a Venn Diagram that describes the following statements:  
a. Some dogs like to be pet and some cats like to be pet.



- b. All lions like meat and all tigers like meat .



10. For each of the statements below, state whether it is **true** or **false**. If it is false, provide the opposite statement and a counterexample. If it is true give supporting evidence of why that is.

a. "All numbers are even numbers".

b. "Some numbers are not whole numbers."

c. "Every even number is followed by an odd number."

d. "All people own a pet."

e. "All houses have a garage."

Challenge: Lets look at how Mr. No would respond to our previous statements.

Statement: Some girls like math and some boys like math.

Mr. No's Response (Opposite statement): All girls do not like math OR all boys do not like math.

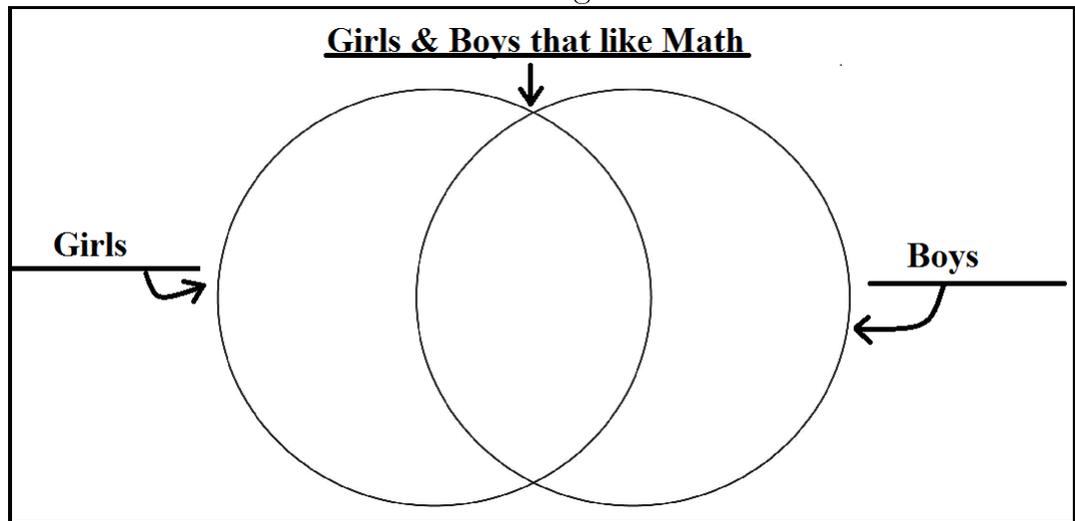
Mr. No claims:

a. All girls

**OR**

b. All boys

11. Fill in what Mr. No's Venn Diagram will look like:



Fill in how Mr. No would respond to these claims and what his Venn Diagram will look like.

12. Some dogs like to be pet and some cats like to be pet.

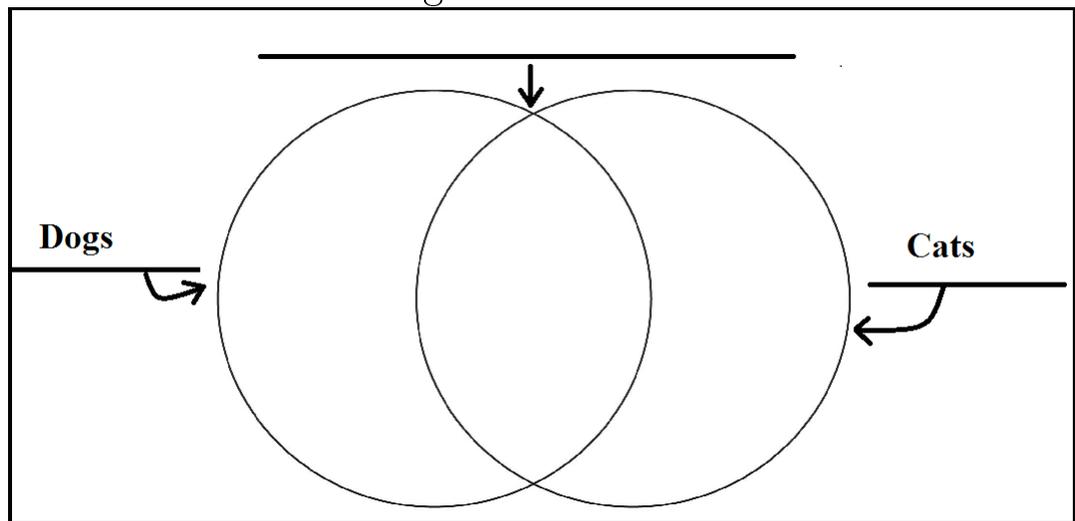
a. Mr. No's Response (Opposite statement):

All dogs

OR

All cats

b. Mr. No's Venn Diagram:



13. All lions like meat and all tigers like meat.

a. Mr. No's Response (Opposite statement):

OR

b. Mr. No's Venn Diagram

