

# Two Rings

- Goals**
- Organize data in two-ring Venn diagrams.
  - Identify data relationships.
  - Find information on a sign.
  - Use logical reasoning, addition, and subtraction to solve problems.

**Notes** You may want to provide students with objects of different colors and sizes that they can place in the regions of the rings to check that their answers match the information on the can, box, or bag.

**Solutions to all problems in this set appear on page 47.**

## Two Rings I

### Questions to Ask

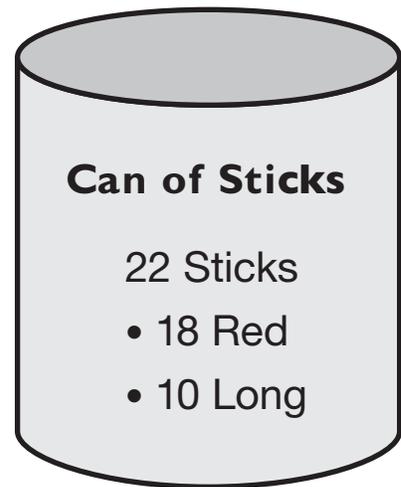
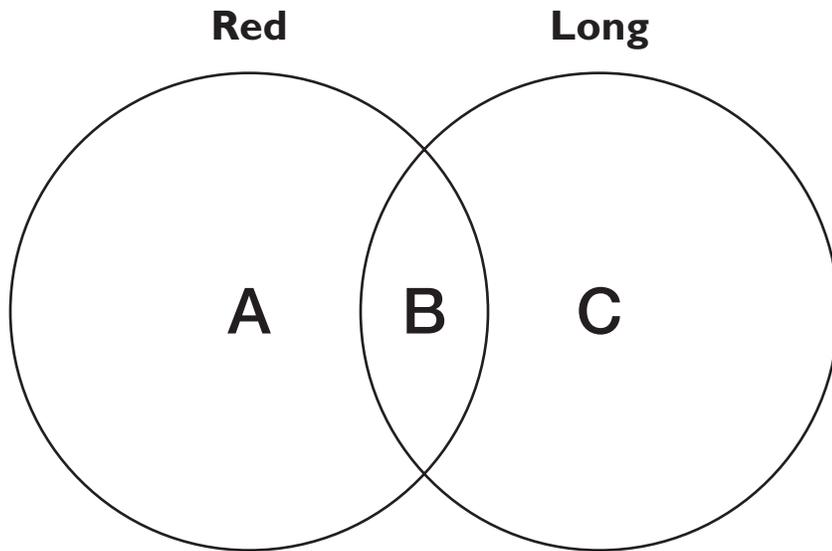
- How many regions are there in the Venn diagram? (3)
- What is the total number of sticks? (22)
- What kind of sticks belong in Region B? (red and long)
- Which regions have red sticks? (A and B) How many sticks are red? (18)
- Which regions have long sticks? (B and C) How many sticks are long? (10)
- What is the sum of 18 and 10? (28) Is 28 the total number of sticks? (no)
- How much more is 28 than 22? (6) What does the 6 stand for? (the number of sticks that were counted twice) In which region are these sticks? (Region B)
- How many sticks are in Region A? (12) How do you know? ( $18 - 6 = 12$ )

### Solutions

1. 12
2. 6
3. 4
4. Possible answer: There are 22 sticks in all. Since  $18 + 10 = 28$ , there are  $28 - 22$ , or 6, sticks that are both red and long. So Region B has 6 sticks, Region A has  $18 - 6$ , or 12, sticks, and Region C has  $10 - 6$ , or 4, sticks.

# Two Rings 1

Use the information on the can of sticks.



1. How many sticks are in Region A? \_\_\_\_\_
2. How many sticks are in Region B? \_\_\_\_\_
3. How many sticks are in Region C? \_\_\_\_\_
4. How did you figure out the number of sticks in each region?

---

---

---

---