

## Venn Diagram Word Problems

- How many kg of dough was in both  $A$  and  $B$ ?

3. In a survey of 125 people,

- 64 had at least one brother,
- 58 had at least one sister,
- 63 had at least one pet,
- 30 had at least one brother and sister,
- 24 had at least 1 brother and pet,
- 35 had at least one sister and pet,
- and 18 had no sibling and no pet.

How many people had at least one brother, sister, and pet?

4. 401 people sign up for sports teams: 245 sign up for soccer, 349 sign up for volleyball, and 300 sign up for basketball. If no one signs up for fewer than 2 sports, how many people sign up for all three sports?

5. In a group of 100 people, there are 45 males, 30 women, and 64 children. How many boys are there?

6. (\*) A study was made of 1000 students to determine which food they like out of apples, bannans, and carrots.

110 did not like any of the options. (1)

95 liked only apples. (2)

435 liked carrots. (3)

291 liked bananas, but not apples. (4)

563 did not like apples. (5)

159 liked bananas and carrots. (6)

354 liked apples, but not all three options. (7)

Find the number of students who liked only apples and bananas.