

## B. Teaching the operator interpretation of the fraction using sets of objects

### 11. The set corresponding to 1 (the case of $\frac{1}{n}$ )

- 1 Danny solved all the following problems, but the unit was deleted.

What was the unit?

Use the objects and draw the missing set.

Problem a: A box labeled 'a' contains two sets. The top set is labeled  $\frac{1}{4}$  and contains two dots. The bottom set is labeled 1 and is empty.

Problem b: A box labeled 'b' contains two sets. The top set is labeled 1 and is empty. The bottom set is labeled  $\frac{1}{2}$  and contains three circles.

Problem c: A box labeled 'c' contains two sets. The top set is labeled 1 and is empty. The bottom set is labeled  $\frac{1}{3}$  and contains four squares.

- 2 Draw the missing set.

Problem a: A box labeled 'a' contains two sets. The top set is labeled 1 and contains four circles. The bottom set is labeled  $\frac{1}{2}$  and is empty.

Problem b: A box labeled 'b' contains two sets. The top set is labeled  $\frac{1}{2}$  and contains four circles. The bottom set is labeled 1 and is empty.

**Discussion** What is similar and what is different in problems a and b?

To the teacher:

You can use the terms *unit* and *set corresponding to 1* alternately, but make sure that the students understand that both terms refer to the same concept.