

[Illustrative Mathematics](#)

1.OA Boys and Girls, Variation 2

[Alignment 1: 1.OA.A.1](#)

9 children were in the class. How many boys and how many girls could have been in the class?

Solve the problem. Write an equation. Draw a picture and use it to explain your answer.

Commentary:

This task represents the Put Together/Take Apart with both addends unknown context for addition and subtraction (see Table 1 in the glossary of the CCSSM for all addition and subtraction problem types). Once a student finds one correct answer, he/she can be encouraged to find another. Ask the student to use objects, pictures, or equations to represent each answer.

Please see the [K. Counting and Cardinality: K–5. Operations and Algebraic Thinking](#) Progressions Document for in-depth information about issues related to students' learning of these kinds of problems.

Solution: Answers

Listing the possible pairings of boys and girls in a systematic way might help the student show that s/he has found all of the possible pairings.

There are 10 possible solutions. Students can select a number between 0 and 9 to represent the number of boys (or girls) and then find the number of girls (or boys, resp).

Possible equations:

- $9 = 0 + 9$
- $9 = 1 + 8$
- $9 = 2 + 7$
- $9 = 3 + 6$
- $9 = 4 + 5$
- $9 = 5 + 4$
- $9 = 6 + 3$
- $9 = 7 + 2$
- $9 = 8 + 1$
- $9 = 9 + 0$

Note that students may write the total on either side of the equation.



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