Illustrative Mathematics

1.OA The Pet Snake

Alignment 1: 1.OA.A.1

- a. The class had a pet snake. It was 14 inches long. It grew 3 more inches. How long is it now?
- b. The class had a pet snake. It was 14 inches long. It grew a few more inches. Now it is 17 inches long. How many inches did it grow?
- c. The class had a pet snake. It grew 3 more inches. Now it is 17 inches long. How long was it to start?

Commentary:

These tasks types represent the Add To contexts for addition and subtraction (see Table 1 in the glossary of the CCSSM for all all addition and subtraction problem types). This task uses a continuous quantity; see "1.OA At the Park" for an Add to problem with a discrete quantity. These problem types wouldn't necessarily be given to students at the same time although students will need experience and practice with all three types. 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.

While students are expect to add and subtract fluently within 10 in first grade (1.OA.6), they are not expected to add and subtract fluently within 20 until second grade (2.OA.2).

Solution: Classifications Included

Students may use objects, pictures, or equations to represent their solutions. The solutions show equations with a question mark representing the unknown value, but other symbols are often used. For example, 14 + ? = 17 might also be written 14 + ? = 17 or $14 + \square = 17$.

a. **Total Unknown:** The snake was 17 inches long. Possible equation: 14 + 3 = ?

b. Addend Unknown: The snake grew 3 more inches. Possible equation: 14+?=17

c. Start Unknown: The snake was 14 inches long to start. Possible equation: ?+3=17

