Illustrative Mathematics

## 1.OA Find the Missing Number

Alignment 1: 1.OA.D. 8
Find the missing number in each of the following equations:

$$
\begin{array}{lll}
9-3=\square & 8+\square=15 & 16-\square=5 \\
\square=7-2 & 13=\square+7 & 6=14-\square
\end{array}
$$

## Commentary:

This task asks students to solve addition and subtraction equations with different structures so that they are able to see the connections between addition and subtraction more easily. Examples should be presented with the the sum or difference on either side of the equal sign in order to dispel the notion that = means "compute."

## Solution: Solution

We know that if we subtract 3 from nine, the result is 6 so the missing number in the first equation is 6 . The first equation should look like:

$$
9-3=6
$$

We can either count up from 8 to 15 or subtract 8 from 15. In either case, the result is 7 . The second equation should look like:

$$
8+7=15
$$

We can ask, "What number do we need to subtract from 16 to get 5 ?" or " 5 plus what number is 16 ?" In either case, the answer is 11 . The third equation should look like:

$$
16-11=5
$$

We know that if we subtract 2 from seven, the result is 5 so the missing number in the first equation is 5 . The first equation should look like:

$$
5=7-2
$$

We can either count up from 7 to 13 or subtract 7 from 13. In either case, the result is 6 . The second equation should look like:

$$
13=6+7
$$

We can ask, "What number do we need to subtract from 14 to get 6 ?" or " 6 plus what number is 14 ?" In either case, the answer is 8 . The third equation should look like:

$$
6=14-8
$$

We have found the missing numbers in each of the given equations.

