# Just In Time Quick Check <br> Standard of Learning (SOL) 3.17 

## Strand: Patterns, Functions, and Algebra

## Standard of Learning (SOL) 3.17

The student will create equations to represent equivalent mathematical relationships.

## Grade Level Skills:

- Identify and use the appropriate symbol to distinguish between expressions that are equal and expressions that are not equal (e.g., $256-13=220+23 ; 143+17=140+20 ; 457+100 \neq 557+100$ ).
- Create equations to represent equivalent mathematical relationships (e.g., $4 \times 3=14-2$ ).


## Just in Time Quick Check

## Just in Time Quick Check Teacher Notes

## Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
- A Balancing Act (Word) / PDF Version
- VDOE Word Wall Cards: Grade 3 (Word) / PDF
- Equal
- Not equal
- Expression

Supporting and Prerequisite SOL: 3.3b, 3.4b, 3.4d, 2.17, 1.15

1. Which symbol makes the number sentence correct?

$$
=\neq
$$

Write the symbol in the box.

$$
33+36 \square 57-12
$$

2. Write a number in the box to make the equation correct.

$$
15+20=\square+10
$$

3. Write a number in the box to make the number sentence correct.

$$
70+\square \neq 120-50
$$

4. Write a number in the box to make the equation correct.

$$
\square-6=6+5
$$

# SOL 3.17 - Just in Time Quick Check Teacher Notes <br> Common Errors/Misconceptions and their Possible Indications 

1. Which symbol makes the number sentence correct?


## Write the symbol in the box.

$$
33+36 \square 57-12
$$

Some students may think the expressions are equal because they added both sides. These students may benefit from more experiences using manipulatives or balances to model equations.
2. Write a number in the box to make the equation correct.

$$
15+20=\square+10
$$

Some students may write 35 in the box because they think the equal symbol means "the answer is." These students may benefit from more experiences using manipulatives or balances to model, with an emphasis on using the equal symbol to describe the relationship between the quantities (i.e., the same as, has the same value as, balanced, equivalent to, etc.).
3. Write a number in the box to make the number sentence correct.


Some students may write zero in the box because they think $\neq$ is the symbol for equality. These students may benefit from using manipulatives or balances to model equations and to model number sentences that are not equations.
4. Write a number in the box to make the equation correct.

$$
\square-6=6+5
$$

Some students may write zero in the box because they look at the numbers next to the equal symbol $(6=6)$. Some students may write 5 in the box because they disregarded the subtraction symbol and use addition in the expression on the left $(5+6=6+5)$. Some students may write 11 in the box because it is the value on the right side of the equation $(11=6+5)$. Some students may write 12 in the box because the six follows the equal symbol and $12-6=6$. These students may need to build their conceptual understanding and would benefit from more experiences using manipulatives and balances to model equations.

