

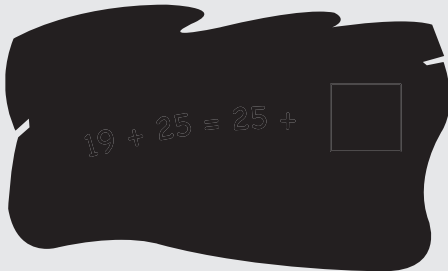
7

Properties of Addition

SOL 3.25.a

Example

Ms. Karet wrote the following problem on the board.



- (A) 19 C 34
 B 25 D 44

Example

What is the sum of $42 + 0$?

- A 0 (C) 42
 B 41 D 43

Thinking It Through

Ask *Can you use an addition property to solve this problem?*
 Yes. The commutative property of addition states that the order of the addends does not change the sum.

$19 + 25 = 44$, so $25 + 19 = 44$. The missing number is *19*, answer *A*.

Thinking It Through

Ask *What happens when you add 0 to a number?* Nothing happens!

The identity property of addition states that when you add 0 to an addend, the sum is the other addend. So, the sum of $42 + 0$ is *42*, answer *C*.

Review

- An **equals sign** ($=$) shows that the quantities on each side of the sign are the same.
- The **commutative property of addition** states that the order of the addends does not change a sum. For example, $3 + 6 = 6 + 3$.
- The **identity property of addition** states when 0 is added to an addend, the sum is the other addend.

Properties of Addition

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DIRECTIONS Read and solve each question. Then circle the letter of the best answer.

- 1 What number makes this sentence true?

$$3 + \blacksquare = 5 + 3$$

- A 2
- B 3
- C 5
- D 8



The order of the addends does NOT change the sum!

- 2 The Colonial Bus has 36 passengers when it stops at Main Street. A total of 0 passengers get on the bus. How many passengers were on the bus after it stopped at Main Street?

- F 35
- G 36
- H 37
- J 72

- 3 Which is a correct application of the commutative property of addition?

- A $12 + 15 = 16 + 11$
- B $18 + 0 = 18$
- C $9 + 7 = 16$
- D $13 + 10 = 10 + 13$

- 4 What number makes this sentence true?

$$0 + \blacksquare = 12$$

- F 0
- G 1
- H 11
- J 12