

Addition Properties

1. Give an example of each of the following properties of addition.

- Commutative Property
- Identity Property
- Associative Property

Solution:

- _____
- _____
- _____

2. Determine the property of addition demonstrated by each of the number sentences.

- $25 + 0 = 25$
- $135 + (11 + 135) = 11 + (43 + 135)$
- $181 + 116 + 11 = 116 + 181 + 11$
- $(16 + 37) + 84 = (84 + 37) + 16$
- $0 + 69 = 69$
- $180 + 132 = 132 + 180$

Solution:

- _____
- _____
- _____
- _____
- _____
- _____

3. Fill the blank with the right number. Identify which property of addition can be used to find the number.

- $700 + (\underline{\quad} + 629) = 629 + (101 + 700)$
- $75 + \underline{\quad} = 361 + 75$
- $\underline{\quad} + 0 = 3,681$
- $67 + \underline{\quad} = 6 + 67$
- $2,020 + \underline{\quad} + 130 = 3,679 + 2,020 + 130$
- $2,012,101 + \underline{\quad} = 50 + 2,012,101$

Solution:

- _____
- _____
- _____
- _____
- _____
- _____

4. Define each of the properties of addition.

Solution:

Associative Property: _____

Identity Property: _____

Commutative Property: _____

Solution:

5. Identify which of the following shows an example of commutative property of addition.

- $210 + 167 + 100 = 210 + 100 + 167$
- $210 - (167 + 100) = (210 + 100) + 167$
- $210 + 0 = 210$
- $210 + (167 - 100) = (210 - 110) + 167$

6. Identify which of the following shows an example of identity property of addition.

- $130 + 77 + 8 = 130 + 8 + 76$
- $130 - (77 + 8) = (130 + 8) + 77$
- $130 + 0 = 130$
- $130 + 0 + 20 = 130 - 20 + 0$

Solution:

7. Identify which of the following shows an example of associative property.

- $25 + 18 = 18 + 25$
- $36 + (7 + 16) = (36 + 7) + 16$
- $6 + 0 = 6$
- $45 + 6 + 0 = 6 + 7 + 45$

Solution:

1.
 - a. $11 + 4 + 7 = 7 + 11 + 4$
 - b. $20 + 0 = 20$
 - c. $15 + (6 + 3) = (15 + 6) + 3$
2.
 - a. Identity Property
 - b. Associative Property
 - c. Commutative Property
 - d. Associative Property
 - e. Identity Property
 - f. Commutative Property
3.
 - a. 101 (Associative Property)
 - b. 361 (Commutative Property)
 - c. 3,681 (Identity Property)
 - d. 6 (Commutative Property)
 - e. 3,679 (Commutative Property)
 - f. 50 (Commutative Property)
4.
 - a. The sum of three or more numbers remains the same regardless of how the numbers are grouped.
 - b. If you add 0 to any number, the result is the same number.
 - c. Changing the order of the addends does not change the sum.
5. A
6. C
7. B