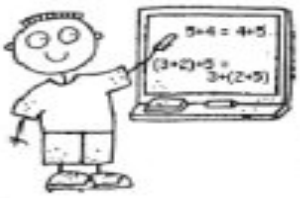
Name _____

Properties of Addition

Worksheet 1



The **commutative property of addition** is the rule which states that the order in which the numbers of an expression are combined does not affect the outcome.
Example: 3 + 5 = 5 + 3

The **associative property of addition** is the rule which states that the grouping of numbers in an expression does not affect the outcome.
Example: (3 + 5) + 7 = 3 + (5 + 7)

Which equation shows the commutative property of addition?

1. ○ (3 + 4) + 3 = 3 + (4 + 3)
   ○ 7 + 3 = 3 + 7
   ○ 7 + 3 = 10
   ○ 10 = 7 + 3

2. ○ 9 + 4 = 4 + 9
   ○ 9 + 4 = 13
   ○ 13 = 9 + 4
   ○ (5 + 4) + 4 = 5 + (4 + 4)

3. ○ 8 + 5 = 13
   ○ 13 = 8 + 5
   ○ (6 + 2) + 5 = 6 + (2 + 5)
   ○ 8 + 5 = 5 + 8

4. ○ 8 = 6 + 2
   ○ (2 + 4) + 2 = 2 + (4 + 2)
   ○ 6 + 2 = 2 + 6
   ○ 6 + 2 = 8

Which equation shows the associative property of addition?

5. ○ 10 = 6 + 4
   ○ (5 + 1) + 4 = 5 + (1 + 4)
   ○ 6 + 4 = 4 + 6
   ○ 6 + 4 = 10

6. ○ (3 + 2) + 7 = 3 + (2 + 7)
   ○ 5 + 7 = 7 + 5
   ○ 5 + 7 = 12
   ○ 12 = 5 + 7

7. ○ 9 + 6 = 6 + 9
   ○ 9 + 6 = 15
   ○ 15 = 9 + 6
   ○ (7 + 2) + 6 = 7 + (2 + 6)

8. ○ 8 + 3 = 11
   ○ 11 = 8 + 3
   ○ (2 + 6) + 3 = 2 + (6 + 3)
   ○ 8 + 3 = 3 + 8