Properties of Multiplication

Name: _____ Date: _____ Grade: Grade 3

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *In Grade 3, (2 x 3) x 4 equals 2 x (3 x 5) by the associative property.*

   Rewrite: _____

2. Fix the sentence:

The Grade 3 associative property lets you change the order of the factors in 4 x 5 x 2.

   Rewrite: _____

3. Fix the sentence: *In Grade 3, (3 x 2) x 5 gives a different product than 3 x (2 x 5).*

   Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. In Grade 3, (2 x 4) x 3 = 2 x (4 x _____).
2. A Grade 3 student finds 5 x 2 x 3 by first computing (5 x 2) = _____ and then multiplying by 3.
3. In Grade 3, 2 x (3 x 4) equals 2 x 12, which equals _____ .
4. Grade 3 students see (4 x 2) x 5 = 4 x (2 x _____) by the associative property.

Part C: True or False?

Read each statement. Circle True or False.

1. In Grade 3, (3 x 4) x 2 equals 3 x (4 x 2) because of the associative property. ◯ True ◯ False
2. The Grade 3 associative property changes the order of the factors. ◯ True ◯ False
3. A Grade 3 student can group 2 x 5 first in 2 x 5 x 7 to make the math easier. ◯ True ◯ False

Answer Key · Properties of Multiplication · Grade: Grade 3

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *In Grade 3, (2 x 3) x 4 equals 2 x (3 x 5) by the associative property.*

   Rewrite: In Grade 3, (2 x 3) x 4 equals 2 x (3 x 4) by the associative property.

2. Fix the sentence:

The Grade 3 associative property lets you change the order of the factors in 4 x 5 x 2.

   Rewrite: The Grade 3 associative property lets you change the grouping of the factors in 4 x 5 x 2.

3. Fix the sentence: *In Grade 3, (3 x 2) x 5 gives a different product than 3 x (2 x 5).*

   Rewrite: In Grade 3, (3 x 2) x 5 gives the same product as 3 x (2 x 5).

Part B: Fill in the Blank

Write the missing word or number on each line.

1. In Grade 3, (2 x 4) x 3 = 2 x (4 x 3).
2. A Grade 3 student finds 5 x 2 x 3 by first computing (5 x 2) = 10 and then multiplying by 3.
3. In Grade 3, 2 x (3 x 4) equals 2 x 12, which equals 24 .
4. Grade 3 students see (4 x 2) x 5 = 4 x (2 x 5) by the associative property.

Part C: True or False?

Read each statement. Circle True or False.

1. In Grade 3, (3 x 4) x 2 equals 3 x (4 x 2) because of the associative property. ● True ○ False
2. The Grade 3 associative property changes the order of the factors. ○ True ● False
3. A Grade 3 student can group 2 x 5 first in 2 x 5 x 7 to make the math easier. ● True ○ False