New York State Testing Program

Mathematics Test

Grade 6

2009 Scoring Guide

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ _____ + _____

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer _____

QUESTION 32

STRAND 1: NUMBER SENSE AND OPERATIONS

Complete and Correct Response:

- 3 (+) 2

AND

- The commutative property states that the order of the numbers on either side of the equal sign in an equation does not affect the sum. Therefore, I changed the order of the numbers on one side of the equation.

  OR other valid response

AND

- $(2 \times 3) \times 5$
  [Note: Student can write an equation and/or show a mix of the associative and commutative properties.]

Score Points:

Apply 3-point holistic rubric.

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 $+$ 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

The commutative property of addition is when the addins can be placed in any order but always amounted to the same sum. For example 2+3=5. So the only other order that fits is 3+2. I know that 3+2 is correct because it gives the same sum as 2+3.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (2x3)x5

This response is complete and correct.

Score Point 3

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 $+$ 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

In the communitive property, the numbers switch around, but does not change the answer it had before.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (2×3)×5

This response is complete and correct. The first part is correct, and the explanation in the second part correctly describes the commutative property of addition by stating that "the numbers switch around," which is acceptable for a complete and correct response.

Score Point 3

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 $+$ 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

Commutative property of addition means moving the numbers around. The equation shows that only the numbers move around, demostrating that this is commutative property of addition.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer $(2 \times 3) \times 5$

This response is partially correct. Both answers are correct; however, the explanation of how the completed equation demonstrates the commutative property of addition fails to express that both sides must be equal.

Score Point 2

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 2 + 3

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

How I completed the equation to demonstrate the commutative property of addition is I remeber that commutative property of adition is writing the same numbers on the other side

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (2x3)x5

This response demonstrates only a limited understanding of the mathematical concepts embodied in the task. The second part is correct; however, the first part is incorrect, and the explanation of how the completed equation demonstrates the commutative property of addition does not state that both sides of the equation are equal.

Score Point 1

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 2 + 3

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

It communitivebecausecommunitive means no arrangedorder

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer 2x(5x3)

This response is incorrect.

Score Point 0

New York State Testing Program

Mathematics Test

Grade 6

2009 Practice Set

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 2 $+$ 3

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

I completed equation demonstrats the commutative property of addition because I swicked the numbers. But in the ent it equils to the same thing.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer $(5 \times 3) \times 2$

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 $+$ 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

I got My Answer by seeing the equation and doing the opost and I got 2+3=3+2 thats my answer.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (2+3)x5

(2+3)x5

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 + 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

The commutative property of addition states that if you commute the numbers they will still have the same answer. Therefore, I commuted the numbers to 3+2=2+3.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (2×3)×5

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 6 $+$ _____

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

The completed equation demonstrates the commutative property of addition because it's the same problem but your replacing it with another number.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer (3x5)x2

32 Complete the equation below to demonstrate the commutative property of addition.

$2 + 3 =$ 3 $+$ 2

On the lines below, explain how the completed equation demonstrates the commutative property of addition.

I completed the equation so its commutative property of addition. Because commutative property means the same equation.

Rewrite the expression below to demonstrate the associative property of multiplication.

$2 \times (3 \times 5)$

Answer _____

6th GRADE MATHEMATICS

Name:_____

PRACTICE SET ANSWER KEY

PS 1	(0-2)	
PS 2	(0-2)	
PS 3	(0-2)	
PS 4	(0-2)	
PS 5	(0-2)	
PS 6	(0-2)	
PS 7	(0-2)	
PS 8	(0-2)	
PS 9	(0-2)	
PS 10	(0-2)	
PS 11	(0-2)	
PS 12	(0-2)	
PS 13	(0-2)	
PS 14	(0-2)	
PS 15	(0-2)	
PS 16	(0-2)	
PS 17	(0-2)	
PS 18	(0-2)	
PS 19	(0-2)	
PS 20	(0-2)	
PS 21	(0-2)	
PS 22	(0-2)	
PS 23	(0-2)	
PS 24	(0-2)	
PS 25	(0-2)	

PS 26	(0-2)	
PS 27	(0-2)	
PS 28	(0-2)	
PS 29	(0-2)	
PS 30	(0-2)	
PS 31	(0-3)	
PS 32	(0-3)	
PS 33	(0-3)	
PS 34	(0-3)	
PS 35	(0-3)	
PS 36	(0-3)	
PS 37	(0-3)	
PS 38	(0-3)	
PS 39	(0-3)	
PS 40	(0-3)	
PS 41	(0-3)	
PS 42	(0-3)	
PS 43	(0-3)	
PS 44	(0-3)	
PS 45	(0-3)	
PS 46	(0-3)	
PS 47	(0-3)	
PS 48	(0-3)	
PS 49	(0-3)	
PS 50	(0-3)	