Finding Associative Property of Multiplication

Name: _____

Determine which choice is an equivalent equation.

1) Which expression is equal to
9 × (1 × 5)

A. 9 × (1 + 5)
B. 9 + (1 × 5)
C. (9 × 1) × 5
D. 9 + (1 + 5)

2) Which expression is equal to
(3 × 0) × 5

A. (3 + 0) + 5
B. 3 × (0 + 5)
C. 3 × (0 × 5)
D. 3 + (0 × 5)

3) Which expression is equal to
(0 × 4) × 10

A. 0 + (4 × 10)
B. 0 × (4 × 10)
C. 0 + (4 + 10)
D. (0 × 4) + 10

4) Which expression is equal to
7 × (5 × 6)

A. 7 + (5 + 6)
B. (7 + 5) + 6
C. 7 + (5 × 6)
D. (7 × 5) × 6

5) Which expression is equal to
(10 × 9) × 3

A. 10 + (9 + 3)
B. 10 × (9 + 3)
C. (10 + 9) × 3
D. 10 × (9 × 3)

6) Which expression is equal to
7 × (8 × 1)

A. (7 + 8) × 1
B. 7 + (8 + 1)
C. (7 × 8) × 1
D. 7 + (8 × 1)

7) Which expression is equal to
10 × (1 × 8)

A. (10 + 1) × 8
B. (10 + 1) + 8
C. 10 × (1 + 8)
D. (10 × 1) × 8

8) Which expression is equal to
4 × (2 × 6)

A. (4 + 2) + 6
B. (4 × 2) + 6
C. 4 + (2 × 6)
D. (4 × 2) × 6

9) Which expression is equal to
8 × (2 × 3)

A. (8 × 2) × 3
B. (8 + 2) + 3
C. 8 + (2 × 3)
D. 8 × (2 + 3)

10) Which expression is equal to
4 × (10 × 2)

A. (4 × 10) × 2
B. (4 + 10) × 2
C. (4 × 10) + 2
D. 4 × (10 + 2)

11) Which expression is equal to
(10 × 2) × 0

A. (10 + 2) + 0
B. 10 + (2 + 0)
C. 10 × (2 + 0)
D. 10 × (2 × 0)

12) Which expression is equal to
1 × (8 × 6)

A. 1 × (8 + 6)
B. 1 + (8 × 6)
C. (1 × 8) × 6
D. 1 + (8 + 6)

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Math

Finding Associative Property of Multiplication

Name: **Answer Key**

Determine which choice is an equivalent equation.

Answers

1) Which expression is equal to
9 × (1 × 5)

A. 9 × (1 + 5)
B. 9 + (1 × 5)
C. (9 × 1) × 5
D. 9 + (1 + 5)

2) Which expression is equal to
(3 × 0) × 5

A. (3 + 0) + 5
B. 3 × (0 + 5)
C. 3 × (0 × 5)
D. 3 + (0 × 5)

3) Which expression is equal to
(0 × 4) × 10

A. 0 + (4 × 10)
B. 0 × (4 × 10)
C. 0 + (4 + 10)
D. (0 × 4) + 10

4) Which expression is equal to
7 × (5 × 6)

A. 7 + (5 + 6)
B. (7 + 5) + 6
C. 7 + (5 × 6)
D. (7 × 5) × 6

5) Which expression is equal to
(10 × 9) × 3

A. 10 + (9 + 3)
B. 10 × (9 + 3)
C. (10 + 9) × 3
D. 10 × (9 × 3)

6) Which expression is equal to
7 × (8 × 1)

A. (7 + 8) × 1
B. 7 + (8 + 1)
C. (7 × 8) × 1
D. 7 + (8 × 1)

7) Which expression is equal to
10 × (1 × 8)

A. (10 + 1) × 8
B. (10 + 1) + 8
C. 10 × (1 + 8)
D. (10 × 1) × 8

8) Which expression is equal to
4 × (2 × 6)

A. (4 + 2) + 6
B. (4 × 2) + 6
C. 4 + (2 × 6)
D. (4 × 2) × 6

9) Which expression is equal to
8 × (2 × 3)

A. (8 × 2) × 3
B. (8 + 2) + 3
C. 8 + (2 × 3)
D. 8 × (2 + 3)

10) Which expression is equal to
4 × (10 × 2)

A. (4 × 10) × 2
B. (4 + 10) × 2
C. (4 × 10) + 2
D. 4 × (10 + 2)

11) Which expression is equal to
(10 × 2) × 0

A. (10 + 2) + 0
B. 10 + (2 + 0)
C. 10 × (2 + 0)
D. 10 × (2 × 0)

12) Which expression is equal to
1 × (8 × 6)

A. 1 × (8 + 6)
B. 1 + (8 × 6)
C. (1 × 8) × 6
D. 1 + (8 + 6)

1. **C**
2. **C**
3. **B**
4. **D**
5. **D**
6. **C**
7. **D**
8. **D**
9. **A**
10. **A**
11. **D**
12. **C**