Finding Associative Property of Multiplication Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to $(9 \times 6) \times 1$

A. $9 + (6 + 1)$
B. $(9 + 6) + 1$
C. $9 \times (6 + 1)$
D. $9 \times (6 \times 1)$

2) Which expression is equal to $6 \times (7 \times 10)$

A. $(6 \times 7) \times 10$
B. $6 + (7 \times 10)$
C. $(6 + 7) \times 10$
D. $(6 + 7) + 10$

3) Which expression is equal to $4 \times (0 \times 8)$

A. $(4 + 0) \times 8$
B. $4 + (0 + 8)$
C. $(4 \times 0) + 8$
D. $(4 \times 0) \times 8$

4) Which expression is equal to $(1 \times 5) \times 9$

A. $1 + (5 \times 9)$
B. $1 \times (5 + 9)$
C. $1 \times (5 \times 9)$
D. $(1 \times 5) + 9$

5) Which expression is equal to $(1 \times 5) \times 9$

A. $(1 + 5) + 9$
B. $(1 + 5) \times 9$
C. $1 \times (5 \times 9)$
D. $(1 \times 5) + 9$

6) Which expression is equal to $0 \times (5 \times 6)$

A. $(0 + 5) \times 6$
B. $(0 + 5) + 6$
C. $(0 \times 5) + 6$
D. $(0 \times 5) \times 6$

7) Which expression is equal to $5 \times (1 \times 10)$

A. $(5 + 1) \times 10$
B. $(5 \times 1) \times 10$
C. $5 \times (1 + 10)$
D. $5 + (1 \times 10)$

8) Which expression is equal to $(4 \times 1) \times 9$

A. $4 \times (1 \times 9)$
B. $4 + (1 + 9)$
C. $4 + (1 \times 9)$
D. $4 \times (1 + 9)$

9) Which expression is equal to $(6 \times 0) \times 4$

A. $6 \times (0 \times 4)$
B. $6 + (0 \times 4)$
C. $6 \times (0 + 4)$
D. $(6 \times 0) + 4$

10) Which expression is equal to $(1 \times 2) \times 4$

A. $(1 \times 2) + 4$
B. $1 + (2 + 4)$
C. $1 \times (2 + 4)$
D. $1 \times (2 \times 4)$

11) Which expression is equal to $0 \times (2 \times 6)$

A. $(0 \times 2) \times 6$
B. $(0 \times 2) + 6$
C. $(0 + 2) \times 6$
D. $0 + (2 + 6)$

12) Which expression is equal to $(2 \times 6) \times 10$

A. $2 \times (6 + 10)$
B. $(2 + 6) + 10$
C. $2 \times (6 \times 10)$
D. $2 + (6 + 10)$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

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

Determine which choice is an equivalent equation.

1) Which expression is equal to (9 × 6) × 1
A. 9 + (6 + 1)
B. (9 + 6) + 1
C. 9 × (6 + 1)
D. 9 × (6 × 1)

2) Which expression is equal to 6 × (7 × 10)
A. (6 × 7) × 10
B. 6 + (7 × 10)
C. (6 + 7) × 10
D. (6 + 7) + 10

3) Which expression is equal to 4 × (0 × 8)
A. (4 + 0) × 8
B. 4 + (0 + 8)
C. (4 × 0) + 8
D. (4 × 0) × 8

4) Which expression is equal to (1 × 5) × 9
A. 1 + (5 × 9)
B. 1 × (5 + 9)
C. 1 × (5 × 9)
D. (1 × 5) + 9

5) Which expression is equal to (1 × 5) × 9
A. (1 + 5) + 9
B. (1 + 5) × 9
C. 1 × (5 × 9)
D. (1 × 5) + 9

6) Which expression is equal to 0 × (5 × 6)
A. (0 + 5) × 6
B. (0 + 5) + 6
C. (0 × 5) + 6
D. (0 × 5) × 6

7) Which expression is equal to 5 × (1 × 10)
A. (5 + 1) × 10
B. (5 × 1) × 10
C. 5 × (1 + 10)
D. 5 + (1 × 10)

8) Which expression is equal to (4 × 1) × 9
A. 4 × (1 × 9)
B. 4 + (1 + 9)
C. 4 + (1 × 9)
D. 4 × (1 + 9)

9) Which expression is equal to (6 × 0) × 4
A. 6 × (0 × 4)
B. 6 + (0 × 4)
C. 6 × (0 + 4)
D. (6 × 0) + 4

10) Which expression is equal to (1 × 2) × 4
A. (1 × 2) + 4
B. 1 + (2 + 4)
C. 1 × (2 + 4)
D. 1 × (2 × 4)

11) Which expression is equal to 0 × (2 × 6)
A. (0 × 2) × 6
B. (0 × 2) + 6
C. (0 + 2) × 6
D. 0 + (2 + 6)

12) Which expression is equal to (2 × 6) × 10
A. 2 × (6 + 10)
B. (2 + 6) + 10
C. 2 × (6 × 10)
D. 2 + (6 + 10)

Answers

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

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