Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to
(2 × 4) × 9
A. 2 × (4 × 9)
B. (2 + 4) + 9
C. (2 × 4) + 9
D. 2 × (4 + 9)

2) Which expression is equal to
(3 × 2) × 9
A. 3 + (2 + 9)
B. 3 + (2 × 9)
C. 3 × (2 × 9)
D. 3 × (2 + 9)

3) Which expression is equal to
(10 × 8) × 5
A. 10 + (8 × 5)
B. 10 × (8 × 5)
C. (10 + 8) + 5
D. 10 + (8 + 5)

4) Which expression is equal to
(4 × 5) × 3
A. (4 × 5) + 3
B. 4 + (5 + 3)
C. 4 × (5 + 3)
D. 4 × (5 × 3)

5) Which expression is equal to
3 × (5 × 4)
A. 3 + (5 + 4)
B. (3 + 5) + 4
C. (3 × 5) × 4
D. 3 + (5 × 4)

6) Which expression is equal to
3 × (7 × 1)
A. (3 + 7) × 1
B. 3 × (7 + 1)
C. (3 × 7) × 1
D. (3 + 7) + 1

7) Which expression is equal to
4 × (6 × 2)
A. (4 × 6) × 2
B. (4 + 6) + 2
C. 4 + (6 × 2)
D. 4 + (6 + 2)

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

9) Which expression is equal to
(10 × 1) × 3
A. 10 × (1 × 3)
B. 10 × (1 + 3)
C. (10 × 1) + 3
D. (10 + 1) × 3

10) Which expression is equal to
10 × (3 × 7)
A. 10 + (3 + 7)
B. (10 + 3) × 7
C. (10 × 3) × 7
D. 10 + (3 × 7)

11) Which expression is equal to
(5 × 4) × 3
A. 5 × (4 × 3)
B. 5 + (4 × 3)
C. (5 × 4) + 3
D. 5 × (4 + 3)

12) Which expression is equal to
5 × (4 × 2)
A. 5 + (4 + 2)
B. (5 × 4) × 2
C. (5 + 4) + 2
D. (5 + 4) × 2

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to (2 × 4) × 9
A. 2 × (4 × 9)
B. (2 + 4) + 9
C. (2 × 4) + 9
D. 2 × (4 + 9)

2) Which expression is equal to (3 × 2) × 9
A. 3 + (2 + 9)
B. 3 + (2 × 9)
C. 3 × (2 × 9)
D. 3 × (2 + 9)

3) Which expression is equal to (10 × 8) × 5
A. 10 + (8 × 5)
B. 10 × (8 × 5)
C. (10 + 8) + 5
D. 10 + (8 + 5)

4) Which expression is equal to (4 × 5) × 3
A. (4 × 5) + 3
B. 4 + (5 + 3)
C. 4 × (5 + 3)
D. 4 × (5 × 3)

5) Which expression is equal to 3 × (5 × 4)
A. 3 + (5 + 4)
B. (3 + 5) + 4
C. (3 × 5) × 4
D. 3 + (5 × 4)

6) Which expression is equal to 3 × (7 × 1)
A. (3 + 7) × 1
B. 3 × (7 + 1)
C. (3 × 7) × 1
D. (3 + 7) + 1

7) Which expression is equal to 4 × (6 × 2)
A. (4 × 6) × 2
B. (4 + 6) + 2
C. 4 + (6 × 2)
D. 4 + (6 + 2)

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

9) Which expression is equal to (10 × 1) × 3
A. 10 × (1 × 3)
B. 10 × (1 + 3)
C. (10 × 1) + 3
D. (10 + 1) × 3

10) Which expression is equal to 10 × (3 × 7)
A. 10 + (3 + 7)
B. (10 + 3) × 7
C. (10 × 3) × 7
D. 10 + (3 × 7)

11) Which expression is equal to (5 × 4) × 3
A. 5 × (4 × 3)
B. 5 + (4 × 3)
C. (5 × 4) + 3
D. 5 × (4 + 3)

12) Which expression is equal to 5 × (4 × 2)
A. 5 + (4 + 2)
B. (5 × 4) × 2
C. (5 + 4) + 2
D. (5 + 4) × 2

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to (10 × 7) × 4
A. (10 × 7) + 4
B. (10 + 7) × 4
C. (10 + 7) + 4
D. 10 × (7 × 4)

2) Which expression is equal to (4 × 7) × 0
A. 4 × (7 × 0)
B. 4 + (7 + 0)
C. (4 + 7) + 0
D. (4 × 7) + 0

3) Which expression is equal to 5 × (4 × 7)
A. (5 + 4) + 7
B. (5 × 4) + 7
C. 5 + (4 × 7)
D. (5 × 4) × 7

4) Which expression is equal to 9 × (5 × 2)
A. (9 + 5) + 2
B. 9 + (5 + 2)
C. (9 × 5) × 2
D. 9 + (5 × 2)

5) Which expression is equal to 10 × (2 × 9)
A. 10 × (2 + 9)
B. (10 × 2) × 9
C. (10 × 2) + 9
D. (10 + 2) × 9

6) Which expression is equal to 10 × (5 × 6)
A. (10 × 5) × 6
B. (10 + 5) + 6
C. (10 + 5) × 6
D. (10 × 5) + 6

7) Which expression is equal to (9 × 5) × 3
A. 9 + (5 + 3)
B. (9 + 5) + 3
C. 9 × (5 × 3)
D. (9 + 5) × 3

8) Which expression is equal to (6 × 7) × 3
A. 6 × (7 + 3)
B. (6 + 7) + 3
C. 6 × (7 × 3)
D. 6 + (7 + 3)

9) Which expression is equal to 5 × (7 × 2)
A. (5 × 7) × 2
B. (5 + 7) + 2
C. (5 × 7) + 2
D. (5 + 7) × 2

10) Which expression is equal to 2 × (3 × 9)
A. (2 × 3) + 9
B. (2 × 3) × 9
C. (2 + 3) + 9
D. (2 + 3) × 9

11) Which expression is equal to (6 × 8) × 1
A. 6 × (8 × 1)
B. 6 × (8 + 1)
C. 6 + (8 + 1)
D. (6 × 8) + 1

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

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to (10 × 7) × 4
A. (10 × 7) + 4
B. (10 + 7) × 4
C. (10 + 7) + 4
D. 10 × (7 × 4)

2) Which expression is equal to (4 × 7) × 0
A. 4 × (7 × 0)
B. 4 + (7 + 0)
C. (4 + 7) + 0
D. (4 × 7) + 0

3) Which expression is equal to 5 × (4 × 7)
A. (5 + 4) + 7
B. (5 × 4) + 7
C. 5 + (4 × 7)
D. (5 × 4) × 7

4) Which expression is equal to 9 × (5 × 2)
A. (9 + 5) + 2
B. 9 + (5 + 2)
C. (9 × 5) × 2
D. 9 + (5 × 2)

5) Which expression is equal to 10 × (2 × 9)
A. 10 × (2 + 9)
B. (10 × 2) × 9
C. (10 × 2) + 9
D. (10 + 2) × 9

6) Which expression is equal to 10 × (5 × 6)
A. (10 × 5) × 6
B. (10 + 5) + 6
C. (10 + 5) × 6
D. (10 × 5) + 6

7) Which expression is equal to (9 × 5) × 3
A. 9 + (5 + 3)
B. (9 + 5) + 3
C. 9 × (5 × 3)
D. (9 + 5) × 3

8) Which expression is equal to (6 × 7) × 3
A. 6 × (7 + 3)
B. (6 + 7) + 3
C. 6 × (7 × 3)
D. 6 + (7 + 3)

9) Which expression is equal to 5 × (7 × 2)
A. (5 × 7) × 2
B. (5 + 7) + 2
C. (5 × 7) + 2
D. (5 + 7) × 2

10) Which expression is equal to 2 × (3 × 9)
A. (2 × 3) + 9
B. (2 × 3) × 9
C. (2 + 3) + 9
D. (2 + 3) × 9

11) Which expression is equal to (6 × 8) × 1
A. 6 × (8 × 1)
B. 6 × (8 + 1)
C. 6 + (8 + 1)
D. (6 × 8) + 1

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

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

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

2) Which expression is equal to
7 × (10 × 0)
A. (7 × 10) × 0
B. 7 + (10 × 0)
C. 7 × (10 + 0)
D. (7 × 10) + 0

3) Which expression is equal to
7 × (8 × 3)
A. (7 + 8) + 3
B. 7 + (8 + 3)
C. (7 × 8) + 3
D. (7 × 8) × 3

4) Which expression is equal to
4 × (7 × 2)
A. 4 + (7 + 2)
B. (4 × 7) + 2
C. (4 + 7) × 2
D. (4 × 7) × 2

5) Which expression is equal to
(5 × 8) × 3
A. (5 + 8) + 3
B. (5 × 8) + 3
C. 5 × (8 + 3)
D. 5 × (8 × 3)

6) Which expression is equal to
8 × (10 × 5)
A. (8 + 10) + 5
B. 8 + (10 × 5)
C. (8 × 10) × 5
D. 8 × (10 + 5)

7) Which expression is equal to
(0 × 10) × 8
A. (0 + 10) + 8
B. 0 + (10 × 8)
C. 0 × (10 × 8)
D. 0 × (10 + 8)

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

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

10) Which expression is equal to
9 × (3 × 10)
A. (9 × 3) × 10
B. (9 × 3) + 10
C. (9 + 3) × 10
D. (9 + 3) + 10

11) Which expression is equal to
(1 × 10) × 6
A. 1 + (10 × 6)
B. 1 + (10 + 6)
C. 1 × (10 × 6)
D. (1 + 10) × 6

12) Which expression is equal to
3 × (0 × 6)
A. 3 × (0 + 6)
B. (3 × 0) × 6
C. (3 + 0) × 6
D. (3 + 0) + 6

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

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

2) Which expression is equal to
7 × (10 × 0)
A. (7 × 10) × 0
B. 7 + (10 × 0)
C. 7 × (10 + 0)
D. (7 × 10) + 0

3) Which expression is equal to
7 × (8 × 3)
A. (7 + 8) + 3
B. 7 + (8 + 3)
C. (7 × 8) + 3
D. (7 × 8) × 3

4) Which expression is equal to
4 × (7 × 2)
A. 4 + (7 + 2)
B. (4 × 7) + 2
C. (4 + 7) × 2
D. (4 × 7) × 2

5) Which expression is equal to
(5 × 8) × 3
A. (5 + 8) + 3
B. (5 × 8) + 3
C. 5 × (8 + 3)
D. 5 × (8 × 3)

6) Which expression is equal to
8 × (10 × 5)
A. (8 + 10) + 5
B. 8 + (10 × 5)
C. (8 × 10) × 5
D. 8 × (10 + 5)

7) Which expression is equal to
(0 × 10) × 8
A. (0 + 10) + 8
B. 0 + (10 × 8)
C. 0 × (10 × 8)
D. 0 × (10 + 8)

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

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

10) Which expression is equal to
9 × (3 × 10)
A. (9 × 3) × 10
B. (9 × 3) + 10
C. (9 + 3) × 10
D. (9 + 3) + 10

11) Which expression is equal to
(1 × 10) × 6
A. 1 + (10 × 6)
B. 1 + (10 + 6)
C. 1 × (10 × 6)
D. (1 + 10) × 6

12) Which expression is equal to
3 × (0 × 6)
A. 3 × (0 + 6)
B. (3 × 0) × 6
C. (3 + 0) × 6
D. (3 + 0) + 6

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to
(6 × 10) × 1
A. 6 × (10 + 1)
B. (6 × 10) + 1
C. 6 × (10 × 1)
D. 6 + (10 × 1)

2) Which expression is equal to
3 × (1 × 9)
A. 3 + (1 × 9)
B. (3 + 1) + 9
C. (3 × 1) × 9
D. 3 + (1 + 9)

3) Which expression is equal to
1 × (8 × 5)
A. 1 × (8 + 5)
B. (1 × 8) + 5
C. (1 × 8) × 5
D. (1 + 8) × 5

4) Which expression is equal to
5 × (7 × 9)
A. (5 + 7) + 9
B. (5 × 7) × 9
C. 5 × (7 + 9)
D. (5 + 7) × 9

5) Which expression is equal to
2 × (7 × 1)
A. 2 × (7 + 1)
B. (2 + 7) + 1
C. (2 × 7) × 1
D. 2 + (7 + 1)

6) Which expression is equal to
1 × (10 × 0)
A. (1 × 10) + 0
B. 1 + (10 × 0)
C. (1 + 10) × 0
D. (1 × 10) × 0

7) Which expression is equal to
6 × (1 × 0)
A. (6 + 1) + 0
B. 6 + (1 × 0)
C. (6 × 1) × 0
D. (6 × 1) + 0

8) Which expression is equal to
(8 × 6) × 9
A. 8 + (6 + 9)
B. 8 × (6 × 9)
C. (8 × 6) + 9
D. 8 + (6 × 9)

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

10) Which expression is equal to
4 × (7 × 6)
A. (4 × 7) × 6
B. 4 + (7 × 6)
C. 4 × (7 + 6)
D. (4 + 7) + 6

11) Which expression is equal to
(9 × 0) × 2
A. 9 × (0 × 2)
B. 9 + (0 × 2)
C. (9 + 0) × 2
D. (9 + 0) + 2

12) Which expression is equal to
2 × (7 × 3)
A. 2 + (7 × 3)
B. (2 + 7) × 3
C. (2 × 7) × 3
D. 2 × (7 + 3)

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to
(6 × 10) × 1
A. 6 × (10 + 1)
B. (6 × 10) + 1
C. 6 × (10 × 1)
D. 6 + (10 × 1)

2) Which expression is equal to
3 × (1 × 9)
A. 3 + (1 × 9)
B. (3 + 1) + 9
C. (3 × 1) × 9
D. 3 + (1 + 9)

3) Which expression is equal to
1 × (8 × 5)
A. 1 × (8 + 5)
B. (1 × 8) + 5
C. (1 × 8) × 5
D. (1 + 8) × 5

4) Which expression is equal to
5 × (7 × 9)
A. (5 + 7) + 9
B. (5 × 7) × 9
C. 5 × (7 + 9)
D. (5 + 7) × 9

5) Which expression is equal to
2 × (7 × 1)
A. 2 × (7 + 1)
B. (2 + 7) + 1
C. (2 × 7) × 1
D. 2 + (7 + 1)

6) Which expression is equal to
1 × (10 × 0)
A. (1 × 10) + 0
B. 1 + (10 × 0)
C. (1 + 10) × 0
D. (1 × 10) × 0

7) Which expression is equal to
6 × (1 × 0)
A. (6 + 1) + 0
B. 6 + (1 × 0)
C. (6 × 1) × 0
D. (6 × 1) + 0

8) Which expression is equal to
(8 × 6) × 9
A. 8 + (6 + 9)
B. 8 × (6 × 9)
C. (8 × 6) + 9
D. 8 + (6 × 9)

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

10) Which expression is equal to
4 × (7 × 6)
A. (4 × 7) × 6
B. 4 + (7 × 6)
C. 4 × (7 + 6)
D. (4 + 7) + 6

11) Which expression is equal to
(9 × 0) × 2
A. 9 × (0 × 2)
B. 9 + (0 × 2)
C. (9 + 0) × 2
D. (9 + 0) + 2

12) Which expression is equal to
2 × (7 × 3)
A. 2 + (7 × 3)
B. (2 + 7) × 3
C. (2 × 7) × 3
D. 2 × (7 + 3)

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to (4 × 6) × 8
A. (4 + 6) + 8
B. (4 + 6) × 8
C. 4 × (6 × 8)
D. 4 + (6 × 8)

2) Which expression is equal to (7 × 3) × 2
A. (7 + 3) × 2
B. 7 × (3 + 2)
C. 7 × (3 × 2)
D. 7 + (3 + 2)

3) Which expression is equal to 8 × (6 × 1)
A. (8 × 6) × 1
B. (8 × 6) + 1
C. (8 + 6) + 1
D. 8 + (6 × 1)

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

5) Which expression is equal to 7 × (0 × 5)
A. (7 × 0) × 5
B. 7 + (0 × 5)
C. (7 + 0) × 5
D. 7 + (0 + 5)

6) Which expression is equal to (7 × 0) × 6
A. (7 + 0) + 6
B. 7 × (0 + 6)
C. 7 × (0 × 6)
D. (7 × 0) + 6

7) Which expression is equal to (1 × 3) × 9
A. 1 × (3 × 9)
B. 1 + (3 × 9)
C. (1 + 3) × 9
D. (1 × 3) + 9

8) Which expression is equal to (3 × 9) × 8
A. (3 + 9) + 8
B. 3 + (9 + 8)
C. 3 × (9 × 8)
D. 3 + (9 × 8)

9) Which expression is equal to 5 × (10 × 8)
A. (5 × 10) × 8
B. (5 × 10) + 8
C. 5 + (10 + 8)
D. (5 + 10) × 8

10) Which expression is equal to 1 × (8 × 5)
A. (1 × 8) × 5
B. 1 × (8 + 5)
C. (1 + 8) × 5
D. 1 + (8 × 5)

11) Which expression is equal to 2 × (7 × 1)
A. (2 + 7) + 1
B. (2 × 7) × 1
C. 2 + (7 + 1)
D. (2 × 7) + 1

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

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to $(4 \times 6) \times 8$
A. $(4 + 6) + 8$
B. $(4 + 6) \times 8$
C. $4 \times (6 \times 8)$
D. $4 + (6 \times 8)$

2) Which expression is equal to $(7 \times 3) \times 2$
A. $(7 + 3) \times 2$
B. $7 \times (3 + 2)$
C. $7 \times (3 \times 2)$
D. $7 + (3 + 2)$

3) Which expression is equal to $8 \times (6 \times 1)$
A. $(8 \times 6) \times 1$
B. $(8 \times 6) + 1$
C. $(8 + 6) + 1$
D. $8 + (6 \times 1)$

4) Which expression is equal to $(10 \times 2) \times 7$
A. $(10 + 2) \times 7$
B. $10 \times (2 \times 7)$
C. $10 + (2 + 7)$
D. $(10 \times 2) + 7$

5) Which expression is equal to $7 \times (0 \times 5)$
A. $(7 \times 0) \times 5$
B. $7 + (0 \times 5)$
C. $(7 + 0) \times 5$
D. $7 + (0 + 5)$

6) Which expression is equal to $(7 \times 0) \times 6$
A. $(7 + 0) + 6$
B. $7 \times (0 + 6)$
C. $7 \times (0 \times 6)$
D. $(7 \times 0) + 6$

7) Which expression is equal to $(1 \times 3) \times 9$
A. $1 \times (3 \times 9)$
B. $1 + (3 \times 9)$
C. $(1 + 3) \times 9$
D. $(1 \times 3) + 9$

8) Which expression is equal to $(3 \times 9) \times 8$
A. $(3 + 9) + 8$
B. $3 + (9 + 8)$
C. $3 \times (9 \times 8)$
D. $3 + (9 \times 8)$

9) Which expression is equal to $5 \times (10 \times 8)$
A. $(5 \times 10) \times 8$
B. $(5 \times 10) + 8$
C. $5 + (10 + 8)$
D. $(5 + 10) \times 8$

10) Which expression is equal to $1 \times (8 \times 5)$
A. $(1 \times 8) \times 5$
B. $1 \times (8 + 5)$
C. $(1 + 8) \times 5$
D. $1 + (8 \times 5)$

11) Which expression is equal to $2 \times (7 \times 1)$
A. $(2 + 7) + 1$
B. $(2 \times 7) \times 1$
C. $2 + (7 + 1)$
D. $(2 \times 7) + 1$

12) Which expression is equal to $(7 \times 5) \times 10$
A. $7 + (5 + 10)$
B. $7 \times (5 + 10)$
C. $7 \times (5 \times 10)$
D. $(7 + 5) + 10$

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to $8 \times (1 \times 3)$

A. $(8 \times 1) \times 3$
B. $(8 + 1) + 3$
C. $8 \times (1 + 3)$
D. $(8 + 1) \times 3$

2) Which expression is equal to $(1 \times 6) \times 10$

A. $1 \times (6 \times 10)$
B. $1 + (6 + 10)$
C. $(1 + 6) \times 10$
D. $(1 \times 6) + 10$

3) Which expression is equal to $(0 \times 1) \times 3$

A. $(0 + 1) \times 3$
B. $0 + (1 \times 3)$
C. $0 + (1 + 3)$
D. $0 \times (1 \times 3)$

4) Which expression is equal to $(10 \times 3) \times 2$

A. $10 \times (3 \times 2)$
B. $(10 \times 3) + 2$
C. $(10 + 3) + 2$
D. $10 \times (3 + 2)$

5) Which expression is equal to $10 \times (3 \times 2)$

A. $10 \times (3 + 2)$
B. $(10 \times 3) + 2$
C. $(10 \times 3) \times 2$
D. $10 + (3 + 2)$

6) Which expression is equal to $5 \times (6 \times 10)$

A. $(5 \times 6) + 10$
B. $(5 \times 6) \times 10$
C. $5 + (6 + 10)$
D. $5 + (6 \times 10)$

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

A. $5 \times (1 \times 4)$
B. $5 \times (1 + 4)$
C. $(5 \times 1) + 4$
D. $(5 + 1) \times 4$

8) Which expression is equal to $0 \times (4 \times 7)$

A. $0 \times (4 + 7)$
B. $(0 \times 4) \times 7$
C. $0 + (4 \times 7)$
D. $(0 + 4) \times 7$

9) Which expression is equal to $(9 \times 7) \times 3$

A. $9 \times (7 \times 3)$
B. $9 + (7 + 3)$
C. $(9 + 7) + 3$
D. $9 \times (7 + 3)$

10) Which expression is equal to $(7 \times 6) \times 8$

A. $(7 + 6) \times 8$
B. $7 \times (6 \times 8)$
C. $7 + (6 + 8)$
D. $7 + (6 \times 8)$

11) Which expression is equal to $(7 \times 0) \times 1$

A. $7 \times (0 \times 1)$
B. $7 + (0 \times 1)$
C. $(7 \times 0) + 1$
D. $(7 + 0) + 1$

12) Which expression is equal to $(8 \times 9) \times 10$

A. $8 \times (9 \times 10)$
B. $(8 + 9) + 10$
C. $(8 \times 9) + 10$
D. $(8 + 9) \times 10$

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to $8 \times (1 \times 3)$
A. $(8 \times 1) \times 3$
B. $(8 + 1) + 3$
C. $8 \times (1 + 3)$
D. $(8 + 1) \times 3$

2) Which expression is equal to $(1 \times 6) \times 10$
A. $1 \times (6 \times 10)$
B. $1 + (6 + 10)$
C. $(1 + 6) \times 10$
D. $(1 \times 6) + 10$

3) Which expression is equal to $(0 \times 1) \times 3$
A. $(0 + 1) \times 3$
B. $0 + (1 \times 3)$
C. $0 + (1 + 3)$
D. $0 \times (1 \times 3)$

4) Which expression is equal to $(10 \times 3) \times 2$
A. $10 \times (3 \times 2)$
B. $(10 \times 3) + 2$
C. $(10 + 3) + 2$
D. $10 \times (3 + 2)$

5) Which expression is equal to $10 \times (3 \times 2)$
A. $10 \times (3 + 2)$
B. $(10 \times 3) + 2$
C. $(10 \times 3) \times 2$
D. $10 + (3 + 2)$

6) Which expression is equal to $5 \times (6 \times 10)$
A. $(5 \times 6) + 10$
B. $(5 \times 6) \times 10$
C. $5 + (6 + 10)$
D. $5 + (6 \times 10)$

7) Which expression is equal to $(5 \times 1) \times 4$
A. $5 \times (1 \times 4)$
B. $5 \times (1 + 4)$
C. $(5 \times 1) + 4$
D. $(5 + 1) \times 4$

8) Which expression is equal to $0 \times (4 \times 7)$
A. $0 \times (4 + 7)$
B. $(0 \times 4) \times 7$
C. $0 + (4 \times 7)$
D. $(0 + 4) \times 7$

9) Which expression is equal to $(9 \times 7) \times 3$
A. $9 \times (7 \times 3)$
B. $9 + (7 + 3)$
C. $(9 + 7) + 3$
D. $9 \times (7 + 3)$

10) Which expression is equal to $(7 \times 6) \times 8$
A. $(7 + 6) \times 8$
B. $7 \times (6 \times 8)$
C. $7 + (6 + 8)$
D. $7 + (6 \times 8)$

11) Which expression is equal to $(7 \times 0) \times 1$
A. $7 \times (0 \times 1)$
B. $7 + (0 \times 1)$
C. $(7 \times 0) + 1$
D. $(7 + 0) + 1$

12) Which expression is equal to $(8 \times 9) \times 10$
A. $8 \times (9 \times 10)$
B. $(8 + 9) + 10$
C. $(8 \times 9) + 10$
D. $(8 + 9) \times 10$

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to $5 \times (8 \times 7)$

A. $(5 \times 8) \times 7$
B. $5 \times (8 + 7)$
C. $(5 + 8) \times 7$
D. $5 + (8 + 7)$

2) Which expression is equal to $6 \times (3 \times 8)$

A. $6 \times (3 + 8)$
B. $6 + (3 + 8)$
C. $(6 \times 3) \times 8$
D. $(6 + 3) \times 8$

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

A. $1 \times (4 + 5)$
B. $(1 \times 4) + 5$
C. $(1 + 4) + 5$
D. $1 \times (4 \times 5)$

4) Which expression is equal to $(10 \times 3) \times 2$

A. $10 + (3 \times 2)$
B. $10 \times (3 \times 2)$
C. $(10 \times 3) + 2$
D. $10 + (3 + 2)$

5) Which expression is equal to $(0 \times 1) \times 5$

A. $0 \times (1 \times 5)$
B. $(0 + 1) \times 5$
C. $0 + (1 \times 5)$
D. $0 + (1 + 5)$

6) Which expression is equal to $1 \times (8 \times 7)$

A. $(1 + 8) + 7$
B. $1 \times (8 + 7)$
C. $(1 \times 8) \times 7$
D. $(1 + 8) \times 7$

7) Which expression is equal to $2 \times (0 \times 9)$

A. $(2 \times 0) \times 9$
B. $(2 + 0) \times 9$
C. $2 \times (0 + 9)$
D. $(2 + 0) + 9$

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

A. $4 + (10 + 1)$
B. $(4 + 10) \times 1$
C. $4 \times (10 + 1)$
D. $(4 \times 10) \times 1$

9) Which expression is equal to $(6 \times 7) \times 1$

A. $6 \times (7 \times 1)$
B. $6 + (7 \times 1)$
C. $(6 + 7) \times 1$
D. $(6 \times 7) + 1$

10) Which expression is equal to $6 \times (1 \times 10)$

A. $(6 + 1) \times 10$
B. $(6 \times 1) \times 10$
C. $6 \times (1 + 10)$
D. $(6 + 1) + 10$

11) Which expression is equal to $4 \times (2 \times 3)$

A. $(4 \times 2) \times 3$
B. $4 + (2 \times 3)$
C. $4 \times (2 + 3)$
D. $(4 + 2) + 3$

12) Which expression is equal to $(8 \times 10) \times 3$

A. $(8 + 10) \times 3$
B. $(8 + 10) + 3$
C. $8 \times (10 + 3)$
D. $8 \times (10 \times 3)$

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to $5 \times (8 \times 7)$
A. $(5 \times 8) \times 7$
B. $5 \times (8 + 7)$
C. $(5 + 8) \times 7$
D. $5 + (8 + 7)$

2) Which expression is equal to $6 \times (3 \times 8)$
A. $6 \times (3 + 8)$
B. $6 + (3 + 8)$
C. $(6 \times 3) \times 8$
D. $(6 + 3) \times 8$

3) Which expression is equal to $(1 \times 4) \times 5$
A. $1 \times (4 + 5)$
B. $(1 \times 4) + 5$
C. $(1 + 4) + 5$
D. $1 \times (4 \times 5)$

4) Which expression is equal to $(10 \times 3) \times 2$
A. $10 + (3 \times 2)$
B. $10 \times (3 \times 2)$
C. $(10 \times 3) + 2$
D. $10 + (3 + 2)$

5) Which expression is equal to $(0 \times 1) \times 5$
A. $0 \times (1 \times 5)$
B. $(0 + 1) \times 5$
C. $0 + (1 \times 5)$
D. $0 + (1 + 5)$

6) Which expression is equal to $1 \times (8 \times 7)$
A. $(1 + 8) + 7$
B. $1 \times (8 + 7)$
C. $(1 \times 8) \times 7$
D. $(1 + 8) \times 7$

7) Which expression is equal to $2 \times (0 \times 9)$
A. $(2 \times 0) \times 9$
B. $(2 + 0) \times 9$
C. $2 \times (0 + 9)$
D. $(2 + 0) + 9$

8) Which expression is equal to $4 \times (10 \times 1)$
A. $4 + (10 + 1)$
B. $(4 + 10) \times 1$
C. $4 \times (10 + 1)$
D. $(4 \times 10) \times 1$

9) Which expression is equal to $(6 \times 7) \times 1$
A. $6 \times (7 \times 1)$
B. $6 + (7 \times 1)$
C. $(6 + 7) \times 1$
D. $(6 \times 7) + 1$

10) Which expression is equal to $6 \times (1 \times 10)$
A. $(6 + 1) \times 10$
B. $(6 \times 1) \times 10$
C. $6 \times (1 + 10)$
D. $(6 + 1) + 10$

11) Which expression is equal to $4 \times (2 \times 3)$
A. $(4 \times 2) \times 3$
B. $4 + (2 \times 3)$
C. $4 \times (2 + 3)$
D. $(4 + 2) + 3$

12) Which expression is equal to $(8 \times 10) \times 3$
A. $(8 + 10) \times 3$
B. $(8 + 10) + 3$
C. $8 \times (10 + 3)$
D. $8 \times (10 \times 3)$

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to
(1 × 9) × 10
A. (1 + 9) + 10
B. (1 × 9) + 10
C. 1 + (9 × 10)
D. 1 × (9 × 10)

2) Which expression is equal to
0 × (7 × 4)
A. 0 + (7 × 4)
B. (0 + 7) × 4
C. (0 + 7) + 4
D. (0 × 7) × 4

3) Which expression is equal to
9 × (0 × 7)
A. 9 × (0 + 7)
B. (9 × 0) × 7
C. (9 + 0) × 7
D. (9 + 0) + 7

4) Which expression is equal to
9 × (1 × 10)
A. (9 + 1) × 10
B. 9 × (1 + 10)
C. (9 × 1) × 10
D. (9 × 1) + 10

5) Which expression is equal to
(1 × 9) × 10
A. (1 × 9) + 10
B. 1 × (9 × 10)
C. 1 + (9 × 10)
D. 1 + (9 + 10)

6) Which expression is equal to
(4 × 5) × 2
A. 4 + (5 × 2)
B. (4 + 5) + 2
C. 4 × (5 × 2)
D. 4 × (5 + 2)

7) Which expression is equal to
3 × (5 × 9)
A. (3 + 5) × 9
B. 3 + (5 + 9)
C. (3 × 5) + 9
D. (3 × 5) × 9

8) Which expression is equal to
3 × (6 × 9)
A. 3 + (6 + 9)
B. (3 × 6) × 9
C. (3 + 6) × 9
D. (3 + 6) + 9

9) Which expression is equal to
(8 × 3) × 1
A. (8 + 3) + 1
B. (8 + 3) × 1
C. 8 + (3 + 1)
D. 8 × (3 × 1)

10) Which expression is equal to
(6 × 5) × 3
A. (6 + 5) + 3
B. 6 × (5 + 3)
C. 6 × (5 × 3)
D. (6 + 5) × 3

11) Which expression is equal to
7 × (4 × 3)
A. 7 × (4 + 3)
B. 7 + (4 + 3)
C. (7 × 4) × 3
D. 7 + (4 × 3)

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

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to $(1 \times 9) \times 10$
A. $(1 + 9) + 10$
B. $(1 \times 9) + 10$
C. $1 + (9 \times 10)$
D. $1 \times (9 \times 10)$

2) Which expression is equal to $0 \times (7 \times 4)$
A. $0 + (7 \times 4)$
B. $(0 + 7) \times 4$
C. $(0 + 7) + 4$
D. $(0 \times 7) \times 4$

3) Which expression is equal to $9 \times (0 \times 7)$
A. $9 \times (0 + 7)$
B. $(9 \times 0) \times 7$
C. $(9 + 0) \times 7$
D. $(9 + 0) + 7$

4) Which expression is equal to $9 \times (1 \times 10)$
A. $(9 + 1) \times 10$
B. $9 \times (1 + 10)$
C. $(9 \times 1) \times 10$
D. $(9 \times 1) + 10$

5) Which expression is equal to $(1 \times 9) \times 10$
A. $(1 \times 9) + 10$
B. $1 \times (9 \times 10)$
C. $1 + (9 \times 10)$
D. $1 + (9 + 10)$

6) Which expression is equal to $(4 \times 5) \times 2$
A. $4 + (5 \times 2)$
B. $(4 + 5) + 2$
C. $4 \times (5 \times 2)$
D. $4 \times (5 + 2)$

7) Which expression is equal to $3 \times (5 \times 9)$
A. $(3 + 5) \times 9$
B. $3 + (5 + 9)$
C. $(3 \times 5) + 9$
D. $(3 \times 5) \times 9$

8) Which expression is equal to $3 \times (6 \times 9)$
A. $3 + (6 + 9)$
B. $(3 \times 6) \times 9$
C. $(3 + 6) \times 9$
D. $(3 + 6) + 9$

9) Which expression is equal to $(8 \times 3) \times 1$
A. $(8 + 3) + 1$
B. $(8 + 3) \times 1$
C. $8 + (3 + 1)$
D. $8 \times (3 \times 1)$

10) Which expression is equal to $(6 \times 5) \times 3$
A. $(6 + 5) + 3$
B. $6 \times (5 + 3)$
C. $6 \times (5 \times 3)$
D. $(6 + 5) \times 3$

11) Which expression is equal to $7 \times (4 \times 3)$
A. $7 \times (4 + 3)$
B. $7 + (4 + 3)$
C. $(7 \times 4) \times 3$
D. $7 + (4 \times 3)$

12) Which expression is equal to $4 \times (1 \times 2)$
A. $4 + (1 \times 2)$
B. $4 + (1 + 2)$
C. $(4 \times 1) \times 2$
D. $(4 \times 1) + 2$

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to
(5 × 2) × 4
A. (5 + 2) + 4
B. (5 + 2) × 4
C. 5 + (2 × 4)
D. 5 × (2 × 4)

2) Which expression is equal to
0 × (10 × 6)
A. (0 × 10) × 6
B. 0 × (10 + 6)
C. (0 + 10) × 6
D. (0 × 10) + 6

3) Which expression is equal to
2 × (9 × 10)
A. (2 × 9) + 10
B. (2 × 9) × 10
C. (2 + 9) + 10
D. 2 + (9 × 10)

4) Which expression is equal to
(4 × 0) × 10
A. 4 × (0 × 10)
B. 4 + (0 × 10)
C. 4 × (0 + 10)
D. (4 × 0) + 10

5) Which expression is equal to
9 × (4 × 2)
A. 9 × (4 + 2)
B. (9 × 4) + 2
C. (9 × 4) × 2
D. 9 + (4 + 2)

6) Which expression is equal to
(4 × 6) × 5
A. 4 × (6 × 5)
B. 4 + (6 + 5)
C. 4 + (6 × 5)
D. (4 + 6) × 5

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

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

9) Which expression is equal to
(6 × 5) × 1
A. (6 × 5) + 1
B. 6 × (5 + 1)
C. 6 × (5 × 1)
D. 6 + (5 × 1)

10) Which expression is equal to
2 × (6 × 8)
A. (2 + 6) × 8
B. (2 × 6) × 8
C. 2 × (6 + 8)
D. 2 + (6 + 8)

11) Which expression is equal to
(3 × 8) × 9
A. (3 + 8) × 9
B. (3 × 8) + 9
C. 3 × (8 × 9)
D. 3 + (8 × 9)

12) Which expression is equal to
3 × (1 × 2)
A. (3 × 1) × 2
B. (3 + 1) + 2
C. (3 + 1) × 2
D. (3 × 1) + 2

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to (5 × 2) × 4
A. (5 + 2) + 4
B. (5 + 2) × 4
C. 5 + (2 × 4)
D. 5 × (2 × 4)

2) Which expression is equal to 0 × (10 × 6)
A. (0 × 10) × 6
B. 0 × (10 + 6)
C. (0 + 10) × 6
D. (0 × 10) + 6

3) Which expression is equal to 2 × (9 × 10)
A. (2 × 9) + 10
B. (2 × 9) × 10
C. (2 + 9) + 10
D. 2 + (9 × 10)

4) Which expression is equal to (4 × 0) × 10
A. 4 × (0 × 10)
B. 4 + (0 × 10)
C. 4 × (0 + 10)
D. (4 × 0) + 10

5) Which expression is equal to 9 × (4 × 2)
A. 9 × (4 + 2)
B. (9 × 4) + 2
C. (9 × 4) × 2
D. 9 + (4 + 2)

6) Which expression is equal to (4 × 6) × 5
A. 4 × (6 × 5)
B. 4 + (6 + 5)
C. 4 + (6 × 5)
D. (4 + 6) × 5

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

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

9) Which expression is equal to (6 × 5) × 1
A. (6 × 5) + 1
B. 6 × (5 + 1)
C. 6 × (5 × 1)
D. 6 + (5 × 1)

10) Which expression is equal to 2 × (6 × 8)
A. (2 + 6) × 8
B. (2 × 6) × 8
C. 2 × (6 + 8)
D. 2 + (6 + 8)

11) Which expression is equal to (3 × 8) × 9
A. (3 + 8) × 9
B. (3 × 8) + 9
C. 3 × (8 × 9)
D. 3 + (8 × 9)

12) Which expression is equal to 3 × (1 × 2)
A. (3 × 1) × 2
B. (3 + 1) + 2
C. (3 + 1) × 2
D. (3 × 1) + 2

Answers

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

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

Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

1) Which expression is equal to $0 \times (10 \times 2)$

A. $0 \times (10 + 2)$
B. $0 + (10 + 2)$
C. $(0 + 10) \times 2$
D. $(0 \times 10) \times 2$

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

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

3) Which expression is equal to $6 \times (2 \times 5)$

A. $(6 \times 2) \times 5$
B. $(6 + 2) + 5$
C. $6 \times (2 + 5)$
D. $6 + (2 + 5)$

4) Which expression is equal to $9 \times (1 \times 3)$

A. $(9 \times 1) \times 3$
B. $(9 + 1) + 3$
C. $9 + (1 + 3)$
D. $9 + (1 \times 3)$

5) Which expression is equal to $7 \times (5 \times 6)$

A. $(7 + 5) \times 6$
B. $7 + (5 + 6)$
C. $7 \times (5 + 6)$
D. $(7 \times 5) \times 6$

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

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

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

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

8) Which expression is equal to $(5 \times 3) \times 6$

A. $5 \times (3 + 6)$
B. $5 + (3 + 6)$
C. $5 \times (3 \times 6)$
D. $5 + (3 \times 6)$

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

A. $(8 + 3) \times 0$
B. $(8 \times 3) \times 0$
C. $8 + (3 + 0)$
D. $(8 \times 3) + 0$

10) Which expression is equal to $5 \times (9 \times 8)$

A. $(5 \times 9) + 8$
B. $5 \times (9 + 8)$
C. $5 + (9 \times 8)$
D. $(5 \times 9) \times 8$

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

A. $(8 \times 3) \times 0$
B. $(8 + 3) + 0$
C. $8 + (3 + 0)$
D. $8 \times (3 + 0)$

12) Which expression is equal to $(8 \times 10) \times 2$

A. $8 + (10 + 2)$
B. $8 + (10 \times 2)$
C. $(8 + 10) + 2$
D. $8 \times (10 \times 2)$

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								

Finding Associative Property of Multiplication Name: **Answer Key**

Determine which choice is an equivalent equation.

1) Which expression is equal to $0 \times (10 \times 2)$
A. $0 \times (10 + 2)$
B. $0 + (10 + 2)$
C. $(0 + 10) \times 2$
D. $(0 \times 10) \times 2$

2) Which expression is equal to $(2 \times 6) \times 10$
A. $2 + (6 + 10)$
B. $(2 \times 6) + 10$
C. $2 \times (6 \times 10)$
D. $(2 + 6) + 10$

3) Which expression is equal to $6 \times (2 \times 5)$
A. $(6 \times 2) \times 5$
B. $(6 + 2) + 5$
C. $6 \times (2 + 5)$
D. $6 + (2 + 5)$

4) Which expression is equal to $9 \times (1 \times 3)$
A. $(9 \times 1) \times 3$
B. $(9 + 1) + 3$
C. $9 + (1 + 3)$
D. $9 + (1 \times 3)$

5) Which expression is equal to $7 \times (5 \times 6)$
A. $(7 + 5) \times 6$
B. $7 + (5 + 6)$
C. $7 \times (5 + 6)$
D. $(7 \times 5) \times 6$

6) Which expression is equal to $9 \times (1 \times 4)$
A. $(9 \times 1) \times 4$
B. $9 + (1 \times 4)$
C. $(9 + 1) \times 4$
D. $9 + (1 + 4)$

7) Which expression is equal to $(1 \times 9) \times 6$
A. $1 + (9 + 6)$
B. $1 + (9 \times 6)$
C. $1 \times (9 \times 6)$
D. $(1 + 9) \times 6$

8) Which expression is equal to $(5 \times 3) \times 6$
A. $5 \times (3 + 6)$
B. $5 + (3 + 6)$
C. $5 \times (3 \times 6)$
D. $5 + (3 \times 6)$

9) Which expression is equal to $8 \times (3 \times 0)$
A. $(8 + 3) \times 0$
B. $(8 \times 3) \times 0$
C. $8 + (3 + 0)$
D. $(8 \times 3) + 0$

10) Which expression is equal to $5 \times (9 \times 8)$
A. $(5 \times 9) + 8$
B. $5 \times (9 + 8)$
C. $5 + (9 \times 8)$
D. $(5 \times 9) \times 8$

11) Which expression is equal to $8 \times (3 \times 0)$
A. $(8 \times 3) \times 0$
B. $(8 + 3) + 0$
C. $8 + (3 + 0)$
D. $8 \times (3 + 0)$

12) Which expression is equal to $(8 \times 10) \times 2$
A. $8 + (10 + 2)$
B. $8 + (10 \times 2)$
C. $(8 + 10) + 2$
D. $8 \times (10 \times 2)$

Answers

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

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