Finding Associative Property of Multiplication

Name:

Determine which choice is an equivalent equation.

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

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

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

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

5) Which expression is equal to
$(8 \times 1) \times 2$
A. $8 \times (1 \times 2)$
B. $8 + (1 + 2)$
C. $8 \times (1 + 2)$
D. $(8 + 1) \times 2$

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

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

8) Which expression is equal to
$5 \times (4 \times 8)$
A. $(5 \times 4) \times 8$
B. $5 + (4 + 8)$
C. $(5 + 4) \times 8$
D. $(5 + 4) + 8$

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

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

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

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

Name: **Answer Key**

Determine which choice is an equivalent equation.

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

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

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A. $8 \times (7 \times 4)$
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A. $7 + (8 \times 6)$
B. $(7 + 8) \times 6$
C. $7 \times (8 \times 6)$
D. $7 + (8 + 6)$

5) Which expression is equal to
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A. $8 \times (1 \times 2)$
B. $8 + (1 + 2)$
C. $8 \times (1 + 2)$
D. $(8 + 1) \times 2$

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C. $(7 + 8) + 4$
D. $(7 \times 8) \times 4$

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

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$(10 \times 4) \times 2$
A. $10 \times (4 \times 2)$
B. $(10 + 4) + 2$
C. $10 + (4 + 2)$
D. $10 + (4 \times 2)$

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B. $(2 + 3) + 8$
C. $(2 \times 3) + 8$
D. $2 + (3 + 8)$

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

Math

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