Finding Associative Property of Multiplication   Name:

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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

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

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

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

Determine which choice is an equivalent equation.

Answers

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

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

1. ___**A**___

2. ___**D**___

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

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

3. ___**B**___

4. ___**D**___

5. ___**D**___

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

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

6. ___**B**___

7. ___**B**___

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

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

8. ___**A**___

9. ___**C**___

10. ___**B**___

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

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

11. ___**D**___

12. ___**A**___

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

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