Determine which choice is an equivalent equation.

1) Which expression is equal to
$(2 \times 4) \times 9$

A. $2 \times (4 \times 9)$

B. $(2 + 4) + 9$

C. $(2 \times 4) + 9$

D. $2 \times (4 + 9)$

2) Which expression is equal to
$(3 \times 2) \times 9$

A. $3 + (2 + 9)$

B. $3 + (2 \times 9)$

C. $3 \times (2 \times 9)$

D. $3 \times (2 + 9)$

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

A. $10 + (8 \times 5)$

B. $10 \times (8 \times 5)$

C. $(10 + 8) + 5$

D. $10 + (8 + 5)$

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

A. $(4 \times 5) + 3$

B. $4 + (5 + 3)$

C. $4 \times (5 + 3)$

D. $4 \times (5 \times 3)$

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

A. $3 + (5 + 4)$

B. $(3 + 5) + 4$

C. $(3 \times 5) \times 4$

D. $3 + (5 \times 4)$

6) Which expression is equal to
$3 \times (7 \times 1)$

A. $(3 + 7) \times 1$

B. $3 \times (7 + 1)$

C. $(3 \times 7) \times 1$

D. $(3 + 7) + 1$

7) Which expression is equal to
$4 \times (6 \times 2)$

A. $(4 \times 6) \times 2$

B. $(4 + 6) + 2$

C. $4 + (6 \times 2)$

D. $4 + (6 + 2)$

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

A. $(6 + 0) + 5$

B. $(6 + 0) \times 5$

C. $6 \times (0 \times 5)$

D. $6 \times (0 + 5)$

9) Which expression is equal to
$(10 \times 1) \times 3$

A. $10 \times (1 \times 3)$

B. $10 \times (1 + 3)$

C. $(10 \times 1) + 3$

D. $(10 + 1) \times 3$

10) Which expression is equal to
$10 \times (3 \times 7)$

A. $10 + (3 + 7)$

B. $(10 + 3) \times 7$

C. $(10 \times 3) \times 7$

D. $10 + (3 \times 7)$

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

A. $5 \times (4 \times 3)$

B. $5 + (4 \times 3)$

C. $(5 \times 4) + 3$

D. $5 \times (4 + 3)$

12) Which expression is equal to
$5 \times (4 \times 2)$

A. $5 + (4 + 2)$

B. $(5 \times 4) \times 2$

C. $(5 + 4) + 2$

D. $(5 + 4) \times 2$

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
$(2 \times 4) \times 9$
A. $2 \times (4 \times 9)$
B. $(2 + 4) + 9$
C. $(2 \times 4) + 9$
D. $2 \times (4 + 9)$

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

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

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

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

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

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

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

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

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

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

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

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								

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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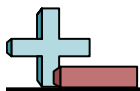C. $(2 + 3) + 9$
D. $(2 + 3) \times 9$

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

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

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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

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

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

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

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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

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

12) Which expression is equal to
    $3 \times (0 \times 6)$
    A. $3 \times (0 + 6)$
    B. $(3 \times 0) \times 6$
    C. $(3 + 0) \times 6$
    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								

Name:

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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

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

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

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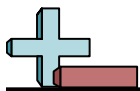2. **A**
3. **D**
4. **D**
5. **D**
6. **C**
7. **C**
8. **A**
9. **A**
10. **A**
11. **C**
12. **B**

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

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)

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)

1. **C**

2. **C**

3. **C**

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

4. **B**

5. **C**

6. **D**

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. **C**

8. **B**

9. **A**

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)

10. **A**

11. **A**

12. **C**

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)

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
    $(4 \times 6) \times 8$
    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. $(7 + 5) + 10$

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
$(4 \times 6) \times 8$

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. $(7 + 5) + 10$

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								

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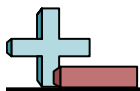B. $7 \times (6 \times 8)$
C. $7 + (6 + 8)$
D. $7 + (6 \times 8)$

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. $(8 + 9) \times 10$

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
$8 \times (1 \times 3)$

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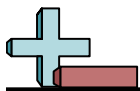B. $7 \times (6 \times 8)$
C. $7 + (6 + 8)$
D. $7 + (6 \times 8)$

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. $(8 + 9) \times 10$

#	Answer
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								

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. $8 \times (10 \times 3)$

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
$5 \times (8 \times 7)$
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. $8 \times (10 \times 3)$

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

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

Name:

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. $6 \times (5 + 3)$
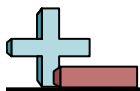
C. $6 \times (5 \times 3)$

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. $(4 \times 1) + 2$

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.

Answers

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

1. **D**

2. **D**

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

3. **B**

4. **C**

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)

5. **B**

6. **C**

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

7. **D**

8. **B**

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

9. **D**

10. **C**

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

11. **C**

12. **C**

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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.

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

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

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

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

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

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

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

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

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

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

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

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

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

Name:

Determine which choice is an equivalent equation.

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

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

1. **D**

2. **A**

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

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

3. **B**

4. **A**

5. **C**

6. **A**

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

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

7. **C**

8. **A**

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

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

9. **C**

10. **B**

11. **C**

12. **A**

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

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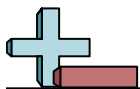C. $2 \times (6 + 8)$
D. $2 + (6 + 8)$

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

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

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
   $0 \times (10 \times 2)$
   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. $8 \times (10 \times 2)$

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								

　　Name:　**Answer Key**

Determine which choice is an equivalent equation.

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

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

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

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

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

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

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

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

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

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

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

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

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								