

Name: _____

Associative Property of Multiplication

The **Associative Property of Multiplication** states that the product of a set of numbers is the same, no matter how they are grouped.

example: $(2 \times 3) \times 4 = 2 \times (3 \times 4)$
 $6 \times 4 = 2 \times 12$
 $24 = 24$

Find the products for each. First solve the part in parenthesis and write a new multiplication fact on the first line. Then write the product on the bottom line.

a. $(4 \times 2) \times 6 = 4 \times (2 \times 6)$

b. $(2 \times 5) \times 3 = 2 \times (5 \times 3)$

c. $(4 \times 5) \times 2 = 4 \times (5 \times 2)$

d. $(4 \times 7) \times 1 = 4 \times (7 \times 1)$

e. $(6 \times 2) \times 5 = 6 \times (2 \times 5)$

f. $(3 \times 3) \times 4 = 3 \times (3 \times 4)$

g. $(3 \times 2) \times 2 = 3 \times (2 \times 2)$

★ $(2 \times 2) \times (4 \times 1) = 2 \times (2 \times 4) \times 1$

ANSWER KEY

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Find the products for each. First solve the part in parenthesis and write a new multiplication fact on the first line. Then write the product on the bottom line.

a. $(4 \times 2) \times 6 = 4 \times (2 \times 6)$

8×6 = 4×12

48 = 48

b. $(2 \times 5) \times 3 = 2 \times (5 \times 3)$

10×3 = 2×15

30 = 30

c. $(4 \times 5) \times 2 = 4 \times (5 \times 2)$

20×2 = 4×10

40 = 40

d. $(4 \times 7) \times 1 = 4 \times (7 \times 1)$

28×1 = 4×7

28 = 28

e. $(6 \times 2) \times 5 = 6 \times (2 \times 5)$

12×5 = 6×10

60 = 60

f. $(3 \times 3) \times 4 = 3 \times (3 \times 4)$

9×4 = 3×12

36 = 36

g. $(3 \times 2) \times 2 = 3 \times (2 \times 2)$

6×2 = 3×4

12 = 12

★ $(2 \times 2) \times (4 \times 1) = 2 \times (2 \times 4) \times 1$

4×4 = $2 \times 8 \times 1$

16 = 16