

Associative Law of Multiplication (C)

Name: _____

Date: _____

Re-write each expression with different parentheses to change the order of operations.

Example: $(8 \times 5) \times 12 = 8 \times (5 \times 12)$

1. $(6 \times 3) \times 9 =$

2. $3 \times (11 \times 17) =$

3. $9 \times (23 \times 16) =$

4. $(16 \times 24) \times 41 =$

5. $26 \times (61 \times 98) =$

6. $6 \times (7 \times (1 \times 12)) =$

7. $2 \times ((13 \times 24) \times 10) =$

8. $(38 \times 19) \times (27 \times 12) =$

9. $47 \times (60 \times (93 \times 2)) =$

10. $((57 \times 25) \times 94) \times 17 =$

Are the expressions in each question equal? Check a few to confirm.

Associative Law of Multiplication (C) Answers

Name: _____

Date: _____

Re-write each expression with different parentheses to change the order of operations.

Example: $(8 \times 5) \times 12 = 8 \times (5 \times 12)$

- $(6 \times 3) \times 9 = 6 \times (3 \times 9)$
- $3 \times (11 \times 17) = (3 \times 11) \times 17$
- $9 \times (23 \times 16) = (9 \times 23) \times 16$
- $(16 \times 24) \times 41 = 16 \times (24 \times 41)$
- $26 \times (61 \times 98) = (26 \times 61) \times 98$
- $6 \times (7 \times (1 \times 12)) = ((6 \times 7) \times 1) \times 12$
 $= (6 \times 7) \times (1 \times 12) = (6 \times (7 \times 1)) \times 12 = 6 \times ((7 \times 1) \times 12)$
- $2 \times ((13 \times 24) \times 10) = ((2 \times 13) \times 24) \times 10$
 $= (2 \times 13) \times (24 \times 10) = (2 \times (13 \times 24)) \times 10 = 2 \times (13 \times (24 \times 10))$
- $(38 \times 19) \times (27 \times 12) = ((38 \times 19) \times 27) \times 12$
 $= (38 \times (19 \times 27)) \times 12 = 38 \times ((19 \times 27) \times 12) = 38 \times (19 \times (27 \times 12))$
- $47 \times (60 \times (93 \times 2)) = ((47 \times 60) \times 93) \times 2$
 $= (47 \times 60) \times (93 \times 2) = (47 \times (60 \times 93)) \times 2 = 47 \times ((60 \times 93) \times 2)$
- $((57 \times 25) \times 94) \times 17 = (57 \times 25) \times (94 \times 17)$
 $= (57 \times (25 \times 94)) \times 17 = 57 \times ((25 \times 94) \times 17) = 57 \times (25 \times (94 \times 17))$

Are the expressions in each question equal? Check a few to confirm.