

Associative Law of Multiplication (A)

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. $6 \times (9 \times 2) =$

2. $5 \times (17 \times 10) =$

3. $(3 \times 29) \times 20 =$

4. $(36 \times 18) \times 12 =$

5. $64 \times (30 \times 74) =$

6. $(8 \times 5) \times (11 \times 3) =$

7. $((15 \times 3) \times 24) \times 11 =$

8. $(2 \times 23) \times (44 \times 30) =$

9. $((87 \times 34) \times 15) \times 69 =$

10. $48 \times ((13 \times 62) \times 93) =$

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

Associative Law of Multiplication (A) Answers

Name: _____

Date: _____

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

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

- $6 \times (9 \times 2) = (6 \times 9) \times 2$
- $5 \times (17 \times 10) = (5 \times 17) \times 10$
- $(3 \times 29) \times 20 = 3 \times (29 \times 20)$
- $(36 \times 18) \times 12 = 36 \times (18 \times 12)$
- $64 \times (30 \times 74) = (64 \times 30) \times 74$
- $(8 \times 5) \times (11 \times 3) = ((8 \times 5) \times 11) \times 3$
 $= (8 \times (5 \times 11)) \times 3 = 8 \times ((5 \times 11) \times 3) = 8 \times (5 \times (11 \times 3))$
- $((15 \times 3) \times 24) \times 11 = (15 \times 3) \times (24 \times 11)$
 $= (15 \times (3 \times 24)) \times 11 = 15 \times ((3 \times 24) \times 11) = 15 \times (3 \times (24 \times 11))$
- $(2 \times 23) \times (44 \times 30) = ((2 \times 23) \times 44) \times 30$
 $= (2 \times (23 \times 44)) \times 30 = 2 \times ((23 \times 44) \times 30) = 2 \times (23 \times (44 \times 30))$
- $((87 \times 34) \times 15) \times 69 = (87 \times 34) \times (15 \times 69)$
 $= (87 \times (34 \times 15)) \times 69 = 87 \times ((34 \times 15) \times 69) = 87 \times (34 \times (15 \times 69))$
- $48 \times ((13 \times 62) \times 93) = ((48 \times 13) \times 62) \times 93$
 $= (48 \times 13) \times (62 \times 93) = (48 \times (13 \times 62)) \times 93 = 48 \times (13 \times (62 \times 93))$

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