

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.

Associative Law of Multiplication (B)

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. $(10 \times 6) \times 1 =$

2. $(13 \times 19) \times 3 =$

3. $15 \times (27 \times 4) =$

4. $50 \times (19 \times 1) =$

5. $16 \times (79 \times 51) =$

6. $(2 \times (10 \times 7)) \times 5 =$

7. $3 \times ((17 \times 22) \times 7) =$

8. $38 \times ((28 \times 19) \times 11) =$

9. $(58 \times 29) \times (96 \times 4) =$

10. $(92 \times 29) \times (50 \times 20) =$

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

Associative Law of Multiplication (B) Answers

Name: _____

Date: _____

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

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

- $(10 \times 6) \times 1 = 10 \times (6 \times 1)$
- $(13 \times 19) \times 3 = 13 \times (19 \times 3)$
- $15 \times (27 \times 4) = (15 \times 27) \times 4$
- $50 \times (19 \times 1) = (50 \times 19) \times 1$
- $16 \times (79 \times 51) = (16 \times 79) \times 51$
- $(2 \times (10 \times 7)) \times 5 = ((2 \times 10) \times 7) \times 5$
 $= (2 \times 10) \times (7 \times 5) = 2 \times ((10 \times 7) \times 5) = 2 \times (10 \times (7 \times 5))$
- $3 \times ((17 \times 22) \times 7) = ((3 \times 17) \times 22) \times 7$
 $= (3 \times 17) \times (22 \times 7) = (3 \times (17 \times 22)) \times 7 = 3 \times (17 \times (22 \times 7))$
- $38 \times ((28 \times 19) \times 11) = ((38 \times 28) \times 19) \times 11$
 $= (38 \times 28) \times (19 \times 11) = (38 \times (28 \times 19)) \times 11 = 38 \times (28 \times (19 \times 11))$
- $(58 \times 29) \times (96 \times 4) = ((58 \times 29) \times 96) \times 4$
 $= (58 \times (29 \times 96)) \times 4 = 58 \times ((29 \times 96) \times 4) = 58 \times (29 \times (96 \times 4))$
- $(92 \times 29) \times (50 \times 20) = ((92 \times 29) \times 50) \times 20$
 $= (92 \times (29 \times 50)) \times 20 = 92 \times ((29 \times 50) \times 20) = 92 \times (29 \times (50 \times 20))$

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

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.

Associative Law of Multiplication (D)

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. $6 \times (2 \times 10) =$

2. $16 \times (3 \times 8) =$

3. $3 \times (12 \times 22) =$

4. $(1 \times 44) \times 20 =$

5. $(83 \times 20) \times 38 =$

6. $2 \times (12 \times (6 \times 7)) =$

7. $((14 \times 22) \times 2) \times 9 =$

8. $(13 \times (37 \times 28)) \times 2 =$

9. $((75 \times 38) \times 71) \times 13 =$

10. $(84 \times (21 \times 40)) \times 54 =$

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

Associative Law of Multiplication (D) Answers

Name: _____

Date: _____

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

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

- $6 \times (2 \times 10) = (6 \times 2) \times 10$
- $16 \times (3 \times 8) = (16 \times 3) \times 8$
- $3 \times (12 \times 22) = (3 \times 12) \times 22$
- $(1 \times 44) \times 20 = 1 \times (44 \times 20)$
- $(83 \times 20) \times 38 = 83 \times (20 \times 38)$
- $2 \times (12 \times (6 \times 7)) = ((2 \times 12) \times 6) \times 7$
 $= (2 \times 12) \times (6 \times 7) = (2 \times (12 \times 6)) \times 7 = 2 \times ((12 \times 6) \times 7)$
- $((14 \times 22) \times 2) \times 9 = (14 \times 22) \times (2 \times 9)$
 $= (14 \times (22 \times 2)) \times 9 = 14 \times ((22 \times 2) \times 9) = 14 \times (22 \times (2 \times 9))$
- $(13 \times (37 \times 28)) \times 2 = ((13 \times 37) \times 28) \times 2$
 $= (13 \times 37) \times (28 \times 2) = 13 \times ((37 \times 28) \times 2) = 13 \times (37 \times (28 \times 2))$
- $((75 \times 38) \times 71) \times 13 = (75 \times 38) \times (71 \times 13)$
 $= (75 \times (38 \times 71)) \times 13 = 75 \times ((38 \times 71) \times 13) = 75 \times (38 \times (71 \times 13))$
- $(84 \times (21 \times 40)) \times 54 = ((84 \times 21) \times 40) \times 54$
 $= (84 \times 21) \times (40 \times 54) = 84 \times ((21 \times 40) \times 54) = 84 \times (21 \times (40 \times 54))$

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

Associative Law of Multiplication (E)

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

2. $9 \times (4 \times 16) =$

3. $29 \times (6 \times 16) =$

4. $(44 \times 33) \times 11 =$

5. $12 \times (84 \times 44) =$

6. $((3 \times 4) \times 11) \times 7 =$

7. $13 \times ((21 \times 9) \times 2) =$

8. $(3 \times 14) \times (47 \times 34) =$

9. $((90 \times 19) \times 27) \times 54 =$

10. $59 \times ((77 \times 28) \times 2) =$

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

Associative Law of Multiplication (E) Answers

Name: _____

Date: _____

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

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

- $(1 \times 6) \times 9 = 1 \times (6 \times 9)$
- $9 \times (4 \times 16) = (9 \times 4) \times 16$
- $29 \times (6 \times 16) = (29 \times 6) \times 16$
- $(44 \times 33) \times 11 = 44 \times (33 \times 11)$
- $12 \times (84 \times 44) = (12 \times 84) \times 44$
- $((3 \times 4) \times 11) \times 7 = (3 \times 4) \times (11 \times 7)$
 $= (3 \times (4 \times 11)) \times 7 = 3 \times ((4 \times 11) \times 7) = 3 \times (4 \times (11 \times 7))$
- $13 \times ((21 \times 9) \times 2) = ((13 \times 21) \times 9) \times 2$
 $= (13 \times 21) \times (9 \times 2) = (13 \times (21 \times 9)) \times 2 = 13 \times (21 \times (9 \times 2))$
- $(3 \times 14) \times (47 \times 34) = ((3 \times 14) \times 47) \times 34$
 $= (3 \times (14 \times 47)) \times 34 = 3 \times ((14 \times 47) \times 34) = 3 \times (14 \times (47 \times 34))$
- $((90 \times 19) \times 27) \times 54 = (90 \times 19) \times (27 \times 54)$
 $= (90 \times (19 \times 27)) \times 54 = 90 \times ((19 \times 27) \times 54) = 90 \times (19 \times (27 \times 54))$
- $59 \times ((77 \times 28) \times 2) = ((59 \times 77) \times 28) \times 2$
 $= (59 \times 77) \times (28 \times 2) = (59 \times (77 \times 28)) \times 2 = 59 \times (77 \times (28 \times 2))$

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

Associative Law of Multiplication (F)

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. $(6 \times 1) \times 10 =$
2. $(4 \times 12) \times 16 =$
3. $14 \times (6 \times 24) =$
4. $43 \times (16 \times 31) =$
5. $59 \times (9 \times 89) =$
6. $8 \times ((2 \times 4) \times 12) =$
7. $(17 \times (22 \times 8)) \times 5 =$
8. $(13 \times (2 \times 35)) \times 47 =$
9. $((60 \times 18) \times 96) \times 27 =$
10. $(9 \times 46) \times (96 \times 53) =$

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

Associative Law of Multiplication (F) Answers

Name: _____

Date: _____

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

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

1. $(6 \times 1) \times 10 = 6 \times (1 \times 10)$

2. $(4 \times 12) \times 16 = 4 \times (12 \times 16)$

3. $14 \times (6 \times 24) = (14 \times 6) \times 24$

4. $43 \times (16 \times 31) = (43 \times 16) \times 31$

5. $59 \times (9 \times 89) = (59 \times 9) \times 89$

6. $8 \times ((2 \times 4) \times 12) = ((8 \times 2) \times 4) \times 12$
 $= (8 \times 2) \times (4 \times 12) = (8 \times (2 \times 4)) \times 12 = 8 \times (2 \times (4 \times 12))$

7. $(17 \times (22 \times 8)) \times 5 = ((17 \times 22) \times 8) \times 5$
 $= (17 \times 22) \times (8 \times 5) = 17 \times ((22 \times 8) \times 5) = 17 \times (22 \times (8 \times 5))$

8. $(13 \times (2 \times 35)) \times 47 = ((13 \times 2) \times 35) \times 47$
 $= (13 \times 2) \times (35 \times 47) = 13 \times ((2 \times 35) \times 47) = 13 \times (2 \times (35 \times 47))$

9. $((60 \times 18) \times 96) \times 27 = (60 \times 18) \times (96 \times 27)$
 $= (60 \times (18 \times 96)) \times 27 = 60 \times ((18 \times 96) \times 27) = 60 \times (18 \times (96 \times 27))$

10. $(9 \times 46) \times (96 \times 53) = ((9 \times 46) \times 96) \times 53$
 $= (9 \times (46 \times 96)) \times 53 = 9 \times ((46 \times 96) \times 53) = 9 \times (46 \times (96 \times 53))$

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

Associative Law of Multiplication (G)

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. $(6 \times 10) \times 3 =$

2. $(8 \times 2) \times 15 =$

3. $(27 \times 12) \times 2 =$

4. $2 \times (23 \times 42) =$

5. $30 \times (55 \times 88) =$

6. $(1 \times 5) \times (7 \times 12) =$

7. $(16 \times (12 \times 2)) \times 20 =$

8. $13 \times ((5 \times 34) \times 40) =$

9. $66 \times ((15 \times 79) \times 32) =$

10. $(48 \times (70 \times 82)) \times 16 =$

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

Associative Law of Multiplication (G) Answers

Name: _____

Date: _____

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

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

- $(6 \times 10) \times 3 = 6 \times (10 \times 3)$
- $(8 \times 2) \times 15 = 8 \times (2 \times 15)$
- $(27 \times 12) \times 2 = 27 \times (12 \times 2)$
- $2 \times (23 \times 42) = (2 \times 23) \times 42$
- $30 \times (55 \times 88) = (30 \times 55) \times 88$
- $(1 \times 5) \times (7 \times 12) = ((1 \times 5) \times 7) \times 12$
 $= (1 \times (5 \times 7)) \times 12 = 1 \times ((5 \times 7) \times 12) = 1 \times (5 \times (7 \times 12))$
- $(16 \times (12 \times 2)) \times 20 = ((16 \times 12) \times 2) \times 20$
 $= (16 \times 12) \times (2 \times 20) = 16 \times ((12 \times 2) \times 20) = 16 \times (12 \times (2 \times 20))$
- $13 \times ((5 \times 34) \times 40) = ((13 \times 5) \times 34) \times 40$
 $= (13 \times 5) \times (34 \times 40) = (13 \times (5 \times 34)) \times 40 = 13 \times (5 \times (34 \times 40))$
- $66 \times ((15 \times 79) \times 32) = ((66 \times 15) \times 79) \times 32$
 $= (66 \times 15) \times (79 \times 32) = (66 \times (15 \times 79)) \times 32 = 66 \times (15 \times (79 \times 32))$
- $(48 \times (70 \times 82)) \times 16 = ((48 \times 70) \times 82) \times 16$
 $= (48 \times 70) \times (82 \times 16) = 48 \times ((70 \times 82) \times 16) = 48 \times (70 \times (82 \times 16))$

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

Associative Law of Multiplication (H)

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. $(10 \times 3) \times 5 =$

2. $18 \times (4 \times 13) =$

3. $(30 \times 12) \times 10 =$

4. $(14 \times 47) \times 18 =$

5. $69 \times (63 \times 5) =$

6. $12 \times (7 \times (6 \times 3)) =$

7. $(12 \times 20) \times (6 \times 15) =$

8. $(4 \times 37) \times (32 \times 22) =$

9. $(12 \times (89 \times 48)) \times 51 =$

10. $(8 \times (32 \times 85)) \times 50 =$

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

Associative Law of Multiplication (H) Answers

Name: _____

Date: _____

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

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

- $(10 \times 3) \times 5 = 10 \times (3 \times 5)$
- $18 \times (4 \times 13) = (18 \times 4) \times 13$
- $(30 \times 12) \times 10 = 30 \times (12 \times 10)$
- $(14 \times 47) \times 18 = 14 \times (47 \times 18)$
- $69 \times (63 \times 5) = (69 \times 63) \times 5$
- $12 \times (7 \times (6 \times 3)) = ((12 \times 7) \times 6) \times 3$
 $= (12 \times 7) \times (6 \times 3) = (12 \times (7 \times 6)) \times 3 = 12 \times ((7 \times 6) \times 3)$
- $(12 \times 20) \times (6 \times 15) = ((12 \times 20) \times 6) \times 15$
 $= (12 \times (20 \times 6)) \times 15 = 12 \times ((20 \times 6) \times 15) = 12 \times (20 \times (6 \times 15))$
- $(4 \times 37) \times (32 \times 22) = ((4 \times 37) \times 32) \times 22$
 $= (4 \times (37 \times 32)) \times 22 = 4 \times ((37 \times 32) \times 22) = 4 \times (37 \times (32 \times 22))$
- $(12 \times (89 \times 48)) \times 51 = ((12 \times 89) \times 48) \times 51$
 $= (12 \times 89) \times (48 \times 51) = 12 \times ((89 \times 48) \times 51) = 12 \times (89 \times (48 \times 51))$
- $(8 \times (32 \times 85)) \times 50 = ((8 \times 32) \times 85) \times 50$
 $= (8 \times 32) \times (85 \times 50) = 8 \times ((32 \times 85) \times 50) = 8 \times (32 \times (85 \times 50))$

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

Associative Law of Multiplication (I)

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. $(6 \times 1) \times 10 =$

2. $10 \times (15 \times 5) =$

3. $(25 \times 8) \times 13 =$

4. $26 \times (9 \times 36) =$

5. $6 \times (40 \times 82) =$

6. $(6 \times 3) \times (12 \times 7) =$

7. $1 \times (15 \times (8 \times 20)) =$

8. $6 \times ((39 \times 22) \times 27) =$

9. $((36 \times 79) \times 64) \times 5 =$

10. $((61 \times 81) \times 29) \times 14 =$

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

Associative Law of Multiplication (I) Answers

Name: _____

Date: _____

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

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

1. $(6 \times 1) \times 10 = 6 \times (1 \times 10)$

2. $10 \times (15 \times 5) = (10 \times 15) \times 5$

3. $(25 \times 8) \times 13 = 25 \times (8 \times 13)$

4. $26 \times (9 \times 36) = (26 \times 9) \times 36$

5. $6 \times (40 \times 82) = (6 \times 40) \times 82$

6. $(6 \times 3) \times (12 \times 7) = ((6 \times 3) \times 12) \times 7$
 $= (6 \times (3 \times 12)) \times 7 = 6 \times ((3 \times 12) \times 7) = 6 \times (3 \times (12 \times 7))$

7. $1 \times (15 \times (8 \times 20)) = ((1 \times 15) \times 8) \times 20$
 $= (1 \times 15) \times (8 \times 20) = (1 \times (15 \times 8)) \times 20 = 1 \times ((15 \times 8) \times 20)$

8. $6 \times ((39 \times 22) \times 27) = ((6 \times 39) \times 22) \times 27$
 $= (6 \times 39) \times (22 \times 27) = (6 \times (39 \times 22)) \times 27 = 6 \times (39 \times (22 \times 27))$

9. $((36 \times 79) \times 64) \times 5 = (36 \times 79) \times (64 \times 5)$
 $= (36 \times (79 \times 64)) \times 5 = 36 \times ((79 \times 64) \times 5) = 36 \times (79 \times (64 \times 5))$

10. $((61 \times 81) \times 29) \times 14 = (61 \times 81) \times (29 \times 14)$
 $= (61 \times (81 \times 29)) \times 14 = 61 \times ((81 \times 29) \times 14) = 61 \times (81 \times (29 \times 14))$

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

Associative Law of Multiplication (J)

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. $(5 \times 10) \times 2 =$
2. $5 \times (13 \times 18) =$
3. $(13 \times 10) \times 30 =$
4. $(35 \times 7) \times 31 =$
5. $39 \times (68 \times 23) =$
6. $7 \times ((3 \times 10) \times 5) =$
7. $(1 \times (21 \times 15)) \times 8 =$
8. $45 \times (13 \times (30 \times 8)) =$
9. $((92 \times 67) \times 19) \times 28 =$
10. $(19 \times (53 \times 89)) \times 47 =$

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

Associative Law of Multiplication (J) Answers

Name: _____

Date: _____

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

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

1. $(5 \times 10) \times 2 = 5 \times (10 \times 2)$

2. $5 \times (13 \times 18) = (5 \times 13) \times 18$

3. $(13 \times 10) \times 30 = 13 \times (10 \times 30)$

4. $(35 \times 7) \times 31 = 35 \times (7 \times 31)$

5. $39 \times (68 \times 23) = (39 \times 68) \times 23$

6. $7 \times ((3 \times 10) \times 5) = ((7 \times 3) \times 10) \times 5$
 $= (7 \times 3) \times (10 \times 5) = (7 \times (3 \times 10)) \times 5 = 7 \times (3 \times (10 \times 5))$

7. $(1 \times (21 \times 15)) \times 8 = ((1 \times 21) \times 15) \times 8$
 $= (1 \times 21) \times (15 \times 8) = 1 \times ((21 \times 15) \times 8) = 1 \times (21 \times (15 \times 8))$

8. $45 \times (13 \times (30 \times 8)) = ((45 \times 13) \times 30) \times 8$
 $= (45 \times 13) \times (30 \times 8) = (45 \times (13 \times 30)) \times 8 = 45 \times ((13 \times 30) \times 8)$

9. $((92 \times 67) \times 19) \times 28 = (92 \times 67) \times (19 \times 28)$
 $= (92 \times (67 \times 19)) \times 28 = 92 \times ((67 \times 19) \times 28) = 92 \times (67 \times (19 \times 28))$

10. $(19 \times (53 \times 89)) \times 47 = ((19 \times 53) \times 89) \times 47$
 $= (19 \times 53) \times (89 \times 47) = 19 \times ((53 \times 89) \times 47) = 19 \times (53 \times (89 \times 47))$

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