

Associative Law of Addition (A)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $3 + (8 + 5) =$

2. $(17 + 10) + 3 =$

3. $14 + (1 + 24) =$

4. $(49 + 31) + 10 =$

5. $2 + (59 + 68) =$

6. $((1 + 8) + 11) + 4 =$

7. $((13 + 2) + 19) + 10 =$

8. $((22 + 33) + 12) + 37 =$

9. $(36 + (75 + 3)) + 62 =$

10. $66 + ((95 + 19) + 28) =$

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

Associative Law of Addition (A) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $3 + (8 + 5) = (3 + 8) + 5$
- $(17 + 10) + 3 = 17 + (10 + 3)$
- $14 + (1 + 24) = (14 + 1) + 24$
- $(49 + 31) + 10 = 49 + (31 + 10)$
- $2 + (59 + 68) = (2 + 59) + 68$
- $((1 + 8) + 11) + 4 = (1 + 8) + (11 + 4)$
 $= (1 + (8 + 11)) + 4 = 1 + ((8 + 11) + 4) = 1 + (8 + (11 + 4))$
- $((13 + 2) + 19) + 10 = (13 + 2) + (19 + 10)$
 $= (13 + (2 + 19)) + 10 = 13 + ((2 + 19) + 10) = 13 + (2 + (19 + 10))$
- $((22 + 33) + 12) + 37 = (22 + 33) + (12 + 37)$
 $= (22 + (33 + 12)) + 37 = 22 + ((33 + 12) + 37) = 22 + (33 + (12 + 37))$
- $(36 + (75 + 3)) + 62 = ((36 + 75) + 3) + 62$
 $= (36 + 75) + (3 + 62) = 36 + ((75 + 3) + 62) = 36 + (75 + (3 + 62))$
- $66 + ((95 + 19) + 28) = ((66 + 95) + 19) + 28$
 $= (66 + 95) + (19 + 28) = (66 + (95 + 19)) + 28 = 66 + (95 + (19 + 28))$

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

Associative Law of Addition (B)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $3 + (8 + 5) =$

2. $5 + (11 + 17) =$

3. $26 + (5 + 20) =$

4. $(4 + 28) + 40 =$

5. $(99 + 36) + 7 =$

6. $6 + (11 + (8 + 3)) =$

7. $(17 + 24) + (2 + 11) =$

8. $((42 + 22) + 10) + 31 =$

9. $((59 + 34) + 18) + 80 =$

10. $71 + ((45 + 83) + 4) =$

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

Associative Law of Addition (B) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $3 + (8 + 5) = (3 + 8) + 5$
- $5 + (11 + 17) = (5 + 11) + 17$
- $26 + (5 + 20) = (26 + 5) + 20$
- $(4 + 28) + 40 = 4 + (28 + 40)$
- $(99 + 36) + 7 = 99 + (36 + 7)$
- $6 + (11 + (8 + 3)) = ((6 + 11) + 8) + 3$
 $= (6 + 11) + (8 + 3) = (6 + (11 + 8)) + 3 = 6 + ((11 + 8) + 3)$
- $(17 + 24) + (2 + 11) = ((17 + 24) + 2) + 11$
 $= (17 + (24 + 2)) + 11 = 17 + ((24 + 2) + 11) = 17 + (24 + (2 + 11))$
- $((42 + 22) + 10) + 31 = (42 + 22) + (10 + 31)$
 $= (42 + (22 + 10)) + 31 = 42 + ((22 + 10) + 31) = 42 + (22 + (10 + 31))$
- $((59 + 34) + 18) + 80 = (59 + 34) + (18 + 80)$
 $= (59 + (34 + 18)) + 80 = 59 + ((34 + 18) + 80) = 59 + (34 + (18 + 80))$
- $71 + ((45 + 83) + 4) = ((71 + 45) + 83) + 4$
 $= (71 + 45) + (83 + 4) = (71 + (45 + 83)) + 4 = 71 + (45 + (83 + 4))$

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

Associative Law of Addition (C)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $2 + (5 + 8) =$

2. $1 + (12 + 18) =$

3. $6 + (16 + 23) =$

4. $(13 + 36) + 25 =$

5. $47 + (87 + 31) =$

6. $6 + ((8 + 10) + 1) =$

7. $14 + (2 + (22 + 12)) =$

8. $(27 + (47 + 24)) + 6 =$

9. $(53 + 16) + (40 + 86) =$

10. $56 + (37 + (94 + 14)) =$

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

Associative Law of Addition (C) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $2 + (5 + 8) = (2 + 5) + 8$
- $1 + (12 + 18) = (1 + 12) + 18$
- $6 + (16 + 23) = (6 + 16) + 23$
- $(13 + 36) + 25 = 13 + (36 + 25)$
- $47 + (87 + 31) = (47 + 87) + 31$
- $6 + ((8 + 10) + 1) = ((6 + 8) + 10) + 1$
 $= (6 + 8) + (10 + 1) = (6 + (8 + 10)) + 1 = 6 + (8 + (10 + 1))$
- $14 + (2 + (22 + 12)) = ((14 + 2) + 22) + 12$
 $= (14 + 2) + (22 + 12) = (14 + (2 + 22)) + 12 = 14 + ((2 + 22) + 12)$
- $(27 + (47 + 24)) + 6 = ((27 + 47) + 24) + 6$
 $= (27 + 47) + (24 + 6) = 27 + ((47 + 24) + 6) = 27 + (47 + (24 + 6))$
- $(53 + 16) + (40 + 86) = ((53 + 16) + 40) + 86$
 $= (53 + (16 + 40)) + 86 = 53 + ((16 + 40) + 86) = 53 + (16 + (40 + 86))$
- $56 + (37 + (94 + 14)) = ((56 + 37) + 94) + 14$
 $= (56 + 37) + (94 + 14) = (56 + (37 + 94)) + 14 = 56 + ((37 + 94) + 14)$

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

Associative Law of Addition (D)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $2 + (6 + 8) =$
2. $(20 + 3) + 10 =$
3. $17 + (21 + 5) =$
4. $(38 + 2) + 26 =$
5. $(74 + 66) + 16 =$
6. $((11 + 7) + 3) + 4 =$
7. $((20 + 18) + 5) + 9 =$
8. $(24 + 32) + (42 + 6) =$
9. $90 + ((24 + 26) + 62) =$
10. $(79 + 32) + (70 + 12) =$

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

Associative Law of Addition (D) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $2 + (6 + 8) = (2 + 6) + 8$
- $(20 + 3) + 10 = 20 + (3 + 10)$
- $17 + (21 + 5) = (17 + 21) + 5$
- $(38 + 2) + 26 = 38 + (2 + 26)$
- $(74 + 66) + 16 = 74 + (66 + 16)$
- $((11 + 7) + 3) + 4 = (11 + 7) + (3 + 4)$
 $= (11 + (7 + 3)) + 4 = 11 + ((7 + 3) + 4) = 11 + (7 + (3 + 4))$
- $((20 + 18) + 5) + 9 = (20 + 18) + (5 + 9)$
 $= (20 + (18 + 5)) + 9 = 20 + ((18 + 5) + 9) = 20 + (18 + (5 + 9))$
- $(24 + 32) + (42 + 6) = ((24 + 32) + 42) + 6$
 $= (24 + (32 + 42)) + 6 = 24 + ((32 + 42) + 6) = 24 + (32 + (42 + 6))$
- $90 + ((24 + 26) + 62) = ((90 + 24) + 26) + 62$
 $= (90 + 24) + (26 + 62) = (90 + (24 + 26)) + 62 = 90 + (24 + (26 + 62))$
- $(79 + 32) + (70 + 12) = ((79 + 32) + 70) + 12$
 $= (79 + (32 + 70)) + 12 = 79 + ((32 + 70) + 12) = 79 + (32 + (70 + 12))$

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

Associative Law of Addition (E)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $(6 + 8) + 2 =$

2. $(2 + 20) + 8 =$

3. $12 + (29 + 8) =$

4. $(46 + 24) + 16 =$

5. $(19 + 66) + 98 =$

6. $7 + (11 + (5 + 2)) =$

7. $17 + ((21 + 5) + 7) =$

8. $27 + (42 + (4 + 15)) =$

9. $46 + (54 + (80 + 1)) =$

10. $(6 + 95) + (57 + 40) =$

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

Associative Law of Addition (E) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $(6 + 8) + 2 = 6 + (8 + 2)$
- $(2 + 20) + 8 = 2 + (20 + 8)$
- $12 + (29 + 8) = (12 + 29) + 8$
- $(46 + 24) + 16 = 46 + (24 + 16)$
- $(19 + 66) + 98 = 19 + (66 + 98)$
- $7 + (11 + (5 + 2)) = ((7 + 11) + 5) + 2$
 $= (7 + 11) + (5 + 2) = (7 + (11 + 5)) + 2 = 7 + ((11 + 5) + 2)$
- $17 + ((21 + 5) + 7) = ((17 + 21) + 5) + 7$
 $= (17 + 21) + (5 + 7) = (17 + (21 + 5)) + 7 = 17 + (21 + (5 + 7))$
- $27 + (42 + (4 + 15)) = ((27 + 42) + 4) + 15$
 $= (27 + 42) + (4 + 15) = (27 + (42 + 4)) + 15 = 27 + ((42 + 4) + 15)$
- $46 + (54 + (80 + 1)) = ((46 + 54) + 80) + 1$
 $= (46 + 54) + (80 + 1) = (46 + (54 + 80)) + 1 = 46 + ((54 + 80) + 1)$
- $(6 + 95) + (57 + 40) = ((6 + 95) + 57) + 40$
 $= (6 + (95 + 57)) + 40 = 6 + ((95 + 57) + 40) = 6 + (95 + (57 + 40))$

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

Associative Law of Addition (F)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $(6 + 8) + 1 =$

2. $17 + (5 + 12) =$

3. $9 + (28 + 13) =$

4. $(6 + 38) + 30 =$

5. $(90 + 14) + 59 =$

6. $(12 + 3) + (8 + 5) =$

7. $((14 + 3) + 8) + 22 =$

8. $44 + (7 + (14 + 26)) =$

9. $(29 + 2) + (53 + 83) =$

10. $73 + (63 + (10 + 25)) =$

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

Associative Law of Addition (F) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $(6 + 8) + 1 = 6 + (8 + 1)$
- $17 + (5 + 12) = (17 + 5) + 12$
- $9 + (28 + 13) = (9 + 28) + 13$
- $(6 + 38) + 30 = 6 + (38 + 30)$
- $(90 + 14) + 59 = 90 + (14 + 59)$
- $(12 + 3) + (8 + 5) = ((12 + 3) + 8) + 5$
 $= (12 + (3 + 8)) + 5 = 12 + ((3 + 8) + 5) = 12 + (3 + (8 + 5))$
- $((14 + 3) + 8) + 22 = (14 + 3) + (8 + 22)$
 $= (14 + (3 + 8)) + 22 = 14 + ((3 + 8) + 22) = 14 + (3 + (8 + 22))$
- $44 + (7 + (14 + 26)) = ((44 + 7) + 14) + 26$
 $= (44 + 7) + (14 + 26) = (44 + (7 + 14)) + 26 = 44 + ((7 + 14) + 26)$
- $(29 + 2) + (53 + 83) = ((29 + 2) + 53) + 83$
 $= (29 + (2 + 53)) + 83 = 29 + ((2 + 53) + 83) = 29 + (2 + (53 + 83))$
- $73 + (63 + (10 + 25)) = ((73 + 63) + 10) + 25$
 $= (73 + 63) + (10 + 25) = (73 + (63 + 10)) + 25 = 73 + ((63 + 10) + 25)$

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

Associative Law of Addition (G)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $(8 + 6) + 1 =$

2. $8 + (18 + 2) =$

3. $18 + (2 + 27) =$

4. $48 + (13 + 28) =$

5. $69 + (46 + 33) =$

6. $((3 + 9) + 6) + 10 =$

7. $8 + ((16 + 24) + 1) =$

8. $8 + ((19 + 40) + 36) =$

9. $40 + ((51 + 8) + 84) =$

10. $((34 + 91) + 10) + 58 =$

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

Associative Law of Addition (G) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $(8 + 6) + 1 = 8 + (6 + 1)$
- $8 + (18 + 2) = (8 + 18) + 2$
- $18 + (2 + 27) = (18 + 2) + 27$
- $48 + (13 + 28) = (48 + 13) + 28$
- $69 + (46 + 33) = (69 + 46) + 33$
- $((3 + 9) + 6) + 10 = (3 + 9) + (6 + 10)$
 $= (3 + (9 + 6)) + 10 = 3 + ((9 + 6) + 10) = 3 + (9 + (6 + 10))$
- $8 + ((16 + 24) + 1) = ((8 + 16) + 24) + 1$
 $= (8 + 16) + (24 + 1) = (8 + (16 + 24)) + 1 = 8 + (16 + (24 + 1))$
- $8 + ((19 + 40) + 36) = ((8 + 19) + 40) + 36$
 $= (8 + 19) + (40 + 36) = (8 + (19 + 40)) + 36 = 8 + (19 + (40 + 36))$
- $40 + ((51 + 8) + 84) = ((40 + 51) + 8) + 84$
 $= (40 + 51) + (8 + 84) = (40 + (51 + 8)) + 84 = 40 + (51 + (8 + 84))$
- $((34 + 91) + 10) + 58 = (34 + 91) + (10 + 58)$
 $= (34 + (91 + 10)) + 58 = 34 + ((91 + 10) + 58) = 34 + (91 + (10 + 58))$

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

Associative Law of Addition (H)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $5 + (1 + 10) =$
2. $10 + (6 + 18) =$
3. $(25 + 7) + 20 =$
4. $(23 + 42) + 1 =$
5. $38 + (7 + 96) =$
6. $1 + (12 + (7 + 6)) =$
7. $(20 + (14 + 7)) + 4 =$
8. $30 + ((11 + 42) + 13) =$
9. $(20 + (30 + 63)) + 75 =$
10. $67 + (7 + (95 + 42)) =$

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

Associative Law of Addition (H) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $5 + (1 + 10) = (5 + 1) + 10$

2. $10 + (6 + 18) = (10 + 6) + 18$

3. $(25 + 7) + 20 = 25 + (7 + 20)$

4. $(23 + 42) + 1 = 23 + (42 + 1)$

5. $38 + (7 + 96) = (38 + 7) + 96$

6. $1 + (12 + (7 + 6)) = ((1 + 12) + 7) + 6$
 $= (1 + 12) + (7 + 6) = (1 + (12 + 7)) + 6 = 1 + ((12 + 7) + 6)$

7. $(20 + (14 + 7)) + 4 = ((20 + 14) + 7) + 4$
 $= (20 + 14) + (7 + 4) = 20 + ((14 + 7) + 4) = 20 + (14 + (7 + 4))$

8. $30 + ((11 + 42) + 13) = ((30 + 11) + 42) + 13$
 $= (30 + 11) + (42 + 13) = (30 + (11 + 42)) + 13 = 30 + (11 + (42 + 13))$

9. $(20 + (30 + 63)) + 75 = ((20 + 30) + 63) + 75$
 $= (20 + 30) + (63 + 75) = 20 + ((30 + 63) + 75) = 20 + (30 + (63 + 75))$

10. $67 + (7 + (95 + 42)) = ((67 + 7) + 95) + 42$
 $= (67 + 7) + (95 + 42) = (67 + (7 + 95)) + 42 = 67 + ((7 + 95) + 42)$

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

Associative Law of Addition (I)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $(5 + 9) + 3 =$

2. $13 + (17 + 4) =$

3. $30 + (17 + 3) =$

4. $(22 + 45) + 1 =$

5. $77 + (47 + 26) =$

6. $6 + ((11 + 2) + 7) =$

7. $11 + ((3 + 14) + 21) =$

8. $(48 + (7 + 35)) + 24 =$

9. $42 + (74 + (17 + 63)) =$

10. $((62 + 47) + 80) + 24 =$

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

Associative Law of Addition (I) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $(5 + 9) + 3 = 5 + (9 + 3)$
- $13 + (17 + 4) = (13 + 17) + 4$
- $30 + (17 + 3) = (30 + 17) + 3$
- $(22 + 45) + 1 = 22 + (45 + 1)$
- $77 + (47 + 26) = (77 + 47) + 26$
- $6 + ((11 + 2) + 7) = ((6 + 11) + 2) + 7$
 $= (6 + 11) + (2 + 7) = (6 + (11 + 2)) + 7 = 6 + (11 + (2 + 7))$
- $11 + ((3 + 14) + 21) = ((11 + 3) + 14) + 21$
 $= (11 + 3) + (14 + 21) = (11 + (3 + 14)) + 21 = 11 + (3 + (14 + 21))$
- $(48 + (7 + 35)) + 24 = ((48 + 7) + 35) + 24$
 $= (48 + 7) + (35 + 24) = 48 + ((7 + 35) + 24) = 48 + (7 + (35 + 24))$
- $42 + (74 + (17 + 63)) = ((42 + 74) + 17) + 63$
 $= (42 + 74) + (17 + 63) = (42 + (74 + 17)) + 63 = 42 + ((74 + 17) + 63)$
- $((62 + 47) + 80) + 24 = (62 + 47) + (80 + 24)$
 $= (62 + (47 + 80)) + 24 = 62 + ((47 + 80) + 24) = 62 + (47 + (80 + 24))$

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

Associative Law of Addition (J)

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

1. $2 + (8 + 5) =$

2. $(6 + 13) + 16 =$

3. $27 + (18 + 6) =$

4. $(48 + 6) + 18 =$

5. $(100 + 62) + 14 =$

6. $(9 + (5 + 10)) + 1 =$

7. $24 + ((18 + 2) + 11) =$

8. $(44 + 11) + (22 + 32) =$

9. $(80 + 8) + (39 + 64) =$

10. $(67 + (11 + 83)) + 38 =$

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

Associative Law of Addition (J) Answers

Name: _____

Date: _____

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

Example: $(8 + 5) + 12 = 8 + (5 + 12)$

- $2 + (8 + 5) = (2 + 8) + 5$
- $(6 + 13) + 16 = 6 + (13 + 16)$
- $27 + (18 + 6) = (27 + 18) + 6$
- $(48 + 6) + 18 = 48 + (6 + 18)$
- $(100 + 62) + 14 = 100 + (62 + 14)$
- $(9 + (5 + 10)) + 1 = ((9 + 5) + 10) + 1$
 $= (9 + 5) + (10 + 1) = 9 + ((5 + 10) + 1) = 9 + (5 + (10 + 1))$
- $24 + ((18 + 2) + 11) = ((24 + 18) + 2) + 11$
 $= (24 + 18) + (2 + 11) = (24 + (18 + 2)) + 11 = 24 + (18 + (2 + 11))$
- $(44 + 11) + (22 + 32) = ((44 + 11) + 22) + 32$
 $= (44 + (11 + 22)) + 32 = 44 + ((11 + 22) + 32) = 44 + (11 + (22 + 32))$
- $(80 + 8) + (39 + 64) = ((80 + 8) + 39) + 64$
 $= (80 + (8 + 39)) + 64 = 80 + ((8 + 39) + 64) = 80 + (8 + (39 + 64))$
- $(67 + (11 + 83)) + 38 = ((67 + 11) + 83) + 38$
 $= (67 + 11) + (83 + 38) = 67 + ((11 + 83) + 38) = 67 + (11 + (83 + 38))$

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