

Apply commutative and associative properties symbolically

NAME	DATE	SCORE / 10
------	------	------------

1 Which property shows that $5 \times (4 \times x) = (5 \times 4) \times x$?

- ☐ Associative property of multiplication ☐ Commutative property of addition
☐ Commutative property of multiplication ☐ Associative property of addition

2 Use the commutative property of addition to write $2 + 3x$ another way.

3 Which property shows that $9 + (4 + y) = (9 + 4) + y$?

- ☐ Associative property of multiplication ☐ Associative property of addition
☐ Commutative property of multiplication ☐ Commutative property of addition

4 Use the commutative property of multiplication to write $n \times 3$ another way.

5 Which property shows that $5y + 2 = 2 + 5y$?

- ☐ Associative property of multiplication ☐ Associative property of addition
☐ Commutative property of multiplication ☐ Commutative property of addition

6 Use the commutative property of addition to write $9 + 7n$ another way.

7 Which property shows that $y \times 9 = 9 \times y$?

- ☐ Associative property of multiplication ☐ Associative property of addition
☐ Commutative property of multiplication ☐ Commutative property of addition
-

8 Use the commutative property of multiplication to write $y \times 9$ another way.

9 Which property shows that $3x + 4 = 4 + 3x$?

- ☐ Associative property of multiplication ☐ Commutative property of multiplication
☐ Commutative property of addition ☐ Associative property of addition
-

10 Use the commutative property of multiplication to write $x \times 7$ another way.

Apply commutative and associative properties symbolically

1 Associative property of multiplication

3 Associative property of addition

5 Commutative property of addition

7 Commutative property of multiplication

9 Commutative property of addition

2 $3x + 2$

4 $3 \times n$

6 $7n + 9$

8 $9 \times y$

10 $7 \times x$
