

ALGEBRA

Content Standard 6

1. Which expression should go in the box to make the number sentence true?

$$9 \times 12 = \square$$

$$12 \times 9$$

A

$$12 \div 9$$

B

$$12 - 9$$

C

$$12 + 9$$

D

2. Which number sentence below demonstrates the identity property of multiplication?

A $6 \times (4 \times 3) = 6 \times 4$

B $3 \times (6 + 5) = (3 \times 6)(3 \times 5)$

C $(175 \times 25) \times 0 = 0$

D $(89 + 25) \times 1 = 89 + 25$

3. Which of the following expressions would go in the \square to demonstrate the associative property of addition?

$$(14 + 17) + 25 + 9 = \square$$

A $25 + (14 + 17) + 9$

B $(17 + 4) + 25 + 9$

C $25 + 9 + (14 + 17)$

D $14 + 17 + (25 + 9)$

4. Which number sentence below demonstrates the associative property of multiplication?

- A** $24 \times (16 \times 11) = (16 \times 11) \times 24$
- B** $(15 \times 27) \times 19 = 15 \times (27 \times 19)$
- C** $(61 \times 30) \times 7 = (61 \times 30) \times 7$
- D** $72 \times (5 \times 12) = 72 \times (12 \times 5)$

5. Which property of whole numbers is demonstrated by the number sentence below?

$$12 + 36 + 4 = (12 + 36 + 4) \times 1$$

- A** Identity property of addition
- B** Commutative property of addition
- C** Identity property of multiplication
- D** Commutative property of multiplication

6. Which number sentence below demonstrates the identity property of addition?

- A** $(36 \times 4) + 19 = 19 + (36 \times 4)$
- B** $0 + (410 \times 10) = 410 \times 10$
- C** $(53 + 62) + 113 = 53 + (62 + 113)$
- D** $(104 + 5) \times 1 = 104 + 5$