

Name _____

Properties

ALGEBRA Lesson 1.3

COMMON CORE STANDARD CC.5.NBT.6

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Use properties to find the sum or product.

1. 6×89

$$\begin{aligned} &6 \times (90 - 1) \\ &(6 \times 90) - (6 \times 1) \\ &540 - 6 \\ &534 \end{aligned}$$

2. $93 + (68 + 7)$

168

3. $5 \times 23 \times 2$

230

4. 8×51

408

5. $34 + 0 + 18 + 26$

78

6. 6×107

642

Complete the equation, and tell which property you used.

7. $(3 \times 10) \times 8 = \underline{3} \times (10 \times 8)$

**Associative Property
of Multiplication**

8. $16 + 31 = 31 + \underline{16}$

**Commutative
Property of Addition**

9. $0 + \underline{91} = 91$

**Identity Property
of Addition**

10. $21 \times \underline{9} = 9 \times 21$

**Commutative Property
of Multiplication**

Problem Solving



11. The Metro Theater has 20 rows of seats with 18 seats in each row. Tickets cost \$5. The theater's income in dollars if all seats are sold is $(20 \times 18) \times 5$. Use properties to find the total income.

\$1,800

12. The numbers of students in the four sixth-grade classes at Northside School are 26, 19, 34, and 21. Use properties to find the total number of students in the four classes.

100

Lesson Check (CC.5.NBT.6)

- To find $19 + (11 + 37)$, Lennie added 19 and 11. Then he added 37 to the sum. Which property did he use?
 - ☐ (A) Distributive Property
 - ☐ (B) Commutative Property of Addition
 - ☒ (C) Associative Property of Addition
 - ☐ (D) Identity Property of Addition
- Marla did 65 sit-ups each day for one week. Which expression can you use to find the total number of sit-ups Marla did during the week?
 - ☐ (A) $(7 \times 6) + (7 \times 5)$
 - ☐ (B) $(5 \times 60) + (5 \times 7)$
 - ☐ (C) $(7 + 60) \times (7 + 5)$
 - ☒ (D) $(7 \times 60) + (7 \times 5)$

Spiral Review (Reviews CC.4.OA.4, CC.4.NBT.5, CC.4.NBT.6; CC.5.NBT.1)

- The average sunflower has 34 petals. Which is the best estimate of the total number of petals on 57 sunflowers? (Grade 4)
 - ☐ (A) 18
 - ☐ (B) 180
 - ☒ (C) 1,800
 - ☐ (D) 18,000
- A golden eagle flies a distance of 290 miles in 5 days. If the eagle flies the same distance each day of its journey, how far does the eagle fly per day? (Grade 4)
 - ☐ (A) 50 miles
 - ☒ (B) 58 miles
 - ☐ (C) 290 miles
 - ☐ (D) 295 miles
- What is the value of the underlined digit in the following number? (Lesson 1.2)

2,983,785

 - ☐ (A) 80
 - ☐ (B) 800
 - ☐ (C) 8,000
 - ☒ (D) 80,000
- The number 5 is (Grade 4)
 - ☒ (A) prime.
 - ☐ (B) composite.
 - ☐ (C) neither prime nor composite.
 - ☐ (D) both prime and composite.