

3.3

Assignment Name _____ Period _____

Simplify the expression. Explain each step.

1. $2 + (a + 8)$

2. $(2x) \cdot 5$

3. $7(4y)$

4. $(0 + c) + 12$

5. $(8e) \cdot 1$

6. $7 \cdot x \cdot 5$

Complete the statement using the specified property.

7. Commutative Property of Addition: $a + 7 =$ _____

8. Commutative Property of Multiplication: $12 \cdot 5 =$ _____

9. Associative Property of Addition: $6 + (9 + 7) =$ _____

10. Associative Property of Multiplication: $2 \cdot (5 \cdot 7) =$ _____

11. Multiplication Property of One: $18 \cdot w \cdot 1 =$ _____

12. Addition Property of Zero: $26 + c + 0 =$ _____

13. Describe and correct the error made in identifying the property.

$$(2 \cdot x) \cdot 4 = 2 \cdot (x \cdot 4)$$

Commutative Property of Multiplication

14. On a bike trip, you traveled 21 miles on the first day, 19 miles on the second day, and n miles on the third day.

a. Write an expression for the number of miles traveled in three days.

b. Simplify the expression. Explain each step.