Name _____

Key Concept and Vocabulary

Commutative Property of Addition

$1 + 3 = 3 + 1$

$2 + (3 + 5) = (2 + 3) + 5$

Associative Property of Addition

Commutative Property of Multiplication

$2 \times 5 = 5 \times 2$

$2 \times (3 \times 5) = (2 \times 3) \times 5$

Associative Property of Multiplication

Properties

Skill Examples

1. $3 + 6 = 6 + 3 = 9$

Commutative Property of Addition

2. $15 + (5 + 3) = (15 + 5) + 3 = 23$

Associative Property of Addition

3. $4 \times 6 = 6 \times 4 = 24$

Commutative Property of Multiplication

4. $2 \times (3 \times 5) = (2 \times 3) \times 5 = 30$

Associative Property of Multiplication

Application Example

5. On a field trip, there are 62 students, 4 teachers, and 8 volunteers. Use a property to find how many people are on the field trip in all.

$62 + 4 + 8 = 62 + 8 + 4$ Commutative Property of Addition

$\qquad\qquad = 70 + 4$

$\qquad\qquad = 74$

There are 74 people on the field trip.

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Identify the property. The find the sum or product.

6. $11 + 36 = 36 + 11$

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7. $10 \times 4 = 4 \times 10$

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8. $5 \times (4 \times 2) = (5 \times 4) \times 2$

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9. $2 + (3 + 5) = (2 + 3) + 5$

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10. $2 + 3 + 4 = 2 + 4 + 3$

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11. $5 \times 2 \times 3 = 2 \times 5 \times 3$

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Show how you can use properties to find the sum or product.

12. $15 + 13 + 35 + 27 =$ _____

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13. $9 \times 5 \times 3 \times 2 =$ _____

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14. COMMUTATIVITY Describe two real-life activities that are *not* commutative. In other words, you get different results if you switch the order in which the activities are performed.

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