Name _____

Practice
**6-1**

# Variables and Expressions

For questions **1** through **4**, use a variable to write an algebraic expression that represents the word phrase.

1. a number of apples divided into 12 baskets _____
2. 5 more than $s$ _____
3. three times the cost for one hat _____
4. nine fewer than the total number of people _____

For **5** through **7**, translate each algebraic expression into words.

5. $3 + w$ _____
6. $8x$ _____
7. $40 - p$ _____
8. Write two different word phrases for the expression $\frac{t}{30}$.

   _____

   _____

9. **Number Sense** Do $5 + x$ and $x + 5$ represent the same expression? Explain.

   _____

   _____

10. **Algebra** Dan is 12 in. taller than Jay. Use $x$ for Jay's height. Which expression shows Dan's height?

    **A** $x + 12$ **B** $x - 12$ **C** $12x$ **D** $\frac{x}{12}$

11. **Explain It** Explain what the expression $6x$ means.

    _____


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Name _____

Practice
6-5

# Order of Operations

Use the order of operations to evaluate each expression.

1. $4 \times 4 + 3 =$ _____
2. $3 + 6 \times 2 \div 3 =$ _____
3. $24 - (8 \div 2) + 6 =$ _____
4. $(15 - 11) \times (25 \div 5) =$ _____
5. $26 - 4 \times 5 + 2 =$ _____
6. $15 \times (7 - 7) + (5 \times 2) =$ _____
7. $(8 \div 4) \times (7 \times 0) =$ _____
8. $5 \times (6 - 3) + 10 \div (8 - 3) =$ _____
9. **Explain It** Which is a true statement, $5 \times 4 + 1 = 25$ or $3 + 7 \times 2 = 17$? Explain your answer.

_____

_____

Insert parentheses to make each statement true.

10. $25 \div 5 - 4 = 25$ _____
11. $7 \times 4 - 4 \div 2 = 26$ _____
12. $3 + 5 \times 2 - 10 = 6$ _____
13. **Strategy Practice** Insert parentheses in the expression $6 + 10 \times 2$ so that:

    **a.** the expression equals 32. _____

    **b.** the expression equals $(12 + 1) \times 2$. _____

14. Solve $(25 - 7) \times 2 \div 4 + 2$.

    A 18 B 11 C 6 D 5

15. Write two order-of-operation problems. Then trade with a classmate and solve the problems.

_____

_____



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Name _____

Practice
**6-4**

# Distributive Property

Use the Distributive Property to multiply mentally.

**1.** $5 \times 607 =$ _____

**2.** $16 \times 102 =$ _____

**3.** $7 \times 420 =$ _____

**4.** $265 \times 5 =$ _____

**5.** $44 \times 60 =$ _____

**6.** $220 \times 19 =$ _____

**7.** $45 \times 280 =$ _____

**8.** $341 \times 32 =$ _____

**9. Number Sense** Fill in the blanks to show how the Distributive Property can be used to find $10 \times 147$.

$10 \times (150 - 3) = (10 \times 150) - ($_____ $\times 3) =$

$1{,}500 -$ _____ = _____

**10.** In 1990, there were 1,133 tornadoes in the U.S. If there were the same number of tornadoes for 10 years in a row, what would be the 10-year total?

_____

**11.** There were 1,071 tornadoes in the U.S. in 2000. What is the number of tornadoes multiplied by 20?

_____

**12.** If $4 \times 312 = 4 \times 300 + n$, which is the value of $n$?

**A** 4 **B** 12 **C** 48 **D** 300

**13. Explain It** Margaret said that she used the Distributive Property to solve $4 \times 444$. Is her answer shown below