Name: _____ Date: _____ Per: ____

Write an algebraic expression for each context. Tell what your variable represents.

1. Miguel ate 15 pieces of candy this morning and continues to eat 4 pieces per hour

2. Steph swims 705 laps per week

3. Juan earns $15.25 for every yard he rakes. He has $17 in his checking account already.

4. Ernest earns 6 minutes of free time a day and has used 6 of them

5. Gale collects $15\frac{2}{3}$ gallons of rain per year and she has used 4 gallons of it

Write an algebraic expression to match each context:

6. 2 less than x _____

7. the sum of 13 and z _____

8. 32 subtracted from y _____

9. the product of a number and 8 _____

10. 45 less than b _____

11. 8 more than w _____

12. the quotient of n and 16 _____

13. y increased by 42 _____

14. p more than 53 _____

15. one-half of b _____

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16. Circle the coefficient and write the number of terms in the equation below:

9x + 6 number of terms:_____

Check-Up

1. It takes Carlos 12 minutes to complete one section in his History workbook or complete one page in his Science book.
   a. Write an expression using a variable that shows how long it takes Carlos to complete some sections in his History workbook. Explain what your variable represents.

   b. Evaluate your expression to find how long it would take Carlos to complete 8 sections in his History workbook.

   c. Write an expression using variables that shows how long it takes Carlos to complete some History sections and complete some pages in his Science book.

   d. Write a different expression that also shows how long it takes Carlos to complete some History sections and some pages in his Science book. Explain how you know these expressions are equivalent.

   e. For homework one night, Carlos has 7 sections of History and 11 pages of Science to complete. Evaluate one of your expressions to find how long it will take Carlos to finish his homework.

2. Antoine has 14 quarters and 17 dimes. Ella has 17 quarters and some dimes.
   a. Write an expression using a variable to show how many coins Ella has. Evaluate the expression for 2, 5, 10, and 25 dimes.

   b. If Ella has the same number of coins as Antoine, write an equation setting their numbers of quarters and dimes equal. Explain how you can use a property to find the number of dimes Ella has.