Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 1 Review**

*Do the following one-step and multi-step unit conversions.*

1. How many inches are there in 3.1 miles?

* There are 5280 feet in one mile
* There are 0.034 ounces in one milliliter
* There are 0.454 kg in one pound
* There are 1.6 kilometers in one mile
* There are 1.05 quarts in one liter
* There are 4 quarts in one gallon

2. Fifty mph is how many feet per second?

3. A bird chirps 10 times a minute. At this rate, about how many times would it chirp in a day?

**Equations: Solve for the given variable. Show all of your work.**

4. Solve for x. 

5. Solve for y. 

6. Solve for m. 

7. Solve for y. 

8. How many terms are in the expression 5*x*2 – 5*x* +6?

9. What are the factors, coefficients, and constants in the expression 5*xy*2 – 5*x* + 6?

**Translate into an algebraic expression.**

10. Eighteen decreased by a number.

11. The cube of number increased by 12.

12. Sabrina wants to have an average of at least 90 on her quizzes. If she took three quizzes and earned a 95, 86 and 82, what is the lowest grade she has to earn on the fourth quiz?

13. Sue agrees to buy a 4-month package deal of monthly gym passes, and in turn receives a

15% discount. Write an algebraic expression to represent the total cost of the monthly passes with the discount, if *x* represents the cost of each monthly pass.

14. Destiny is trying to find the sum of 3 consecutive even integers. Their sum is 66. Find the 3 numbers.

15. The width of a rectangle is 5 inches more than the length. The perimeter is 126. Find the length and width of the rectangle.

16. Find two consecutive integers such that the sum of the greatest integer and twice the lesser integer is 40.

17. A rectangular playground is 60 meters longer than it is wide. It can be enclosed by 920 maters of fencing. Find its length.