Algebra I
Notes Section 1.3
Write Expressions

Big Ideas
1. How to know that certain words and phrases indicate the operation(s) to be used in a real-world situation.
2. How to use a verbal model to write an expression that models a real-world situation.
3. How to use unit analysis to check that an expression is reasonable.

Vocabulary

I. Addition _____

II. Subtraction _____

III. Mulitiplication_____

IV. Division _____

EXAMPLE 1   Translate the verbal phrase into an expression.

a) 4 less than the quantity 6 times a number n   _____

b) 3 times the sum of 7 and a number y   _____

c) The difference of 22 and a the square of a number _____

d) The quotient when the quantity 10 plus a number x _____
    is divided by 2

EXAMPLE 2   You work with 5 other people at an ice cream stand. All the workers put their tips into a jar and share the amount equally at the end of the day. Write an expression for each person's share ($) of the tips.

Vocabulary

Rate: _____

Unit Rate: _____

EXAMPLE 3   A car travels 120 miles in 2 hours. Find the unit rate in feet per second.

$\dfrac{120 \text{ miles}}{2 \text{ hours}}$

EXAMPLE 4   For a training program, each day you run a given distance and then walk to cool down. One day you run 2 miles and then walk for 20 minutes at a rate of 0.1 miles per second. What total distance do you cover?