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Wording for the legal statement above is adapted from the legal statement for *Trigonometry*, published in 2009 by The cK-12 Foundation: <http://about.ck12.org/>

Lesson Planning:

- 1.6 goals:
 - Order Ops
 - Identifying the numbers that add one time or repeatedly, and calculating
 - Into to writing expression
- 1.7 goals:
 - Styrofoam cup activity.
 - Students are first given 1 cup and a ruler. They are asked to predict how tall a stack of 10 cups will be (in cm).
 - To get the other 9 cups (to check their prediction), they will need to first show me their prediction.
 - Parsing the written story (again)
 - Writing the expression
- 1.8 goals:
 - Multiple representations:
 - Table → story → expression
 - Graph → expression → story
 - Etc

#1-4 will be part of the whole-class discussion (see teacher materials).

Practice

5). SCENARIO: At lunch, Jerome is eating chicken nuggets. There are about 47 calories per nugget. He has already eaten a McDonald's McDouble, which has 390 calories.

- a). How many total calories will he have eaten after 2 nuggets?
- b). How many total calories will he have eaten after 6 nuggets?
- c). How many total calories will he have eaten after 12 nuggets?
- d). Let x = the number of nuggets he eats. Write an expression for the total calories consumed.

****Note:** The total amount of cholesterol in a McDouble and 12 chicken nuggets is 170 mg. The government recommends eating less than 300 mg of cholesterol in a day. So in one meal, you would have eaten over half your day's cholesterol.

Sources: <http://nutrition.mcdonalds.com/nutritionexchange/nutritionfacts.pdf> and <http://www.health.gov/dietaryguidelines/dga2005/recommendations.htm>, retrieved 7/1/10.

Example:

- 6). SCENARIO: When the whistle is blown, Angelique is 2 ft. from the coach. She starts sprinting away at about 19 ft/s.
- a) What is the repeated amount? _____
 - How do you know? _____
 - b) What is the one-time amount? _____
 - c) How far from the coach will Angelique be after 8 s? (Show work).

d) How far from the coach will Angelique be after 17s? (Show work).

e) Let t = the time (in seconds) that Angelique has been running. Write an expression for her distance from the coach.

Practice:

7). SCENARIO: On his birthday, Jamar started saving up to buy an Xbox. Every day he makes sure to save another \$3. He also saved \$50 that he got as a birthday present.

- What is the repeated amount? _____
 - How do you know? _____
- What is the one-time amount? _____
- How much money will Jamar have saved after 15 days? (Show work).
- How much money will Jamar have saved after 22 days? (Show work).
- Write an expression for the total amount of money saved.

Independent Practice:

8). SCENARIO: Felicia starts off on 7 Mile Road. She walks north (toward the higher mile road numbers) at a rate of 2.5 miles per hour.

- What is the repeated amount? _____
 - How do you know? _____
- What is the one-time amount? _____
- Where would she end up if she kept walking for 6 hours? (Show work).

- Where would she end up if she walked for 10 hours? (Show work).

- Let t = the time (in hours) that she walks. Write an expression for her final location.

Homework

- 1). SCENARIO: Charles is on the track team. He ran 1 mile to get from home to athletic field, and now he is running laps around the track. Each lap is 0.25 miles.

- What is the repeated amount? _____
 - How do you know? _____
- What is the one-time amount? _____
- How many total miles will he have run after 15 laps? (Show work).
- How many total miles will he have run after 33 laps? (Show work).
- Let l = the number of laps. Write an expression for his total distance.

2. Please evaluate:

a). $2 + 4(3 + 11) - 10$

b). $18 - 15 \div 3 \times 2$

c). $4(3 + 5(10 - 8))$

3. If you make \$9/hour, how long will it take you to earn \$840? (Show work, as always)