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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

Pizza Delivery, Minimum Wage, and Life

1.6

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

Practice

|  |  |
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| 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. 1. What is the repeated amount? \_\_\_\_\_\_\_\_\_\_\_\_
	* How do you know? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the one-time amount? \_\_\_\_\_\_\_\_\_\_\_\_
3. How far from the coach will Angelique be after 8 s? (Show work).
4. How far from the coach will Angelique be after 17s? (Show work).
5. Let *t* = the time (in seconds) that Angelique has been running. Write an expression for her distance from the coach.
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| 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. |

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| 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 after33 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 ÷ 3 × 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)