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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

|  |  |
| --- | --- |
| 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)