Welcome!

Make a quick list of places that you have visited that have charged admission and include the approximate admission price.

On the last day of the Ocean Bike Tour, the riders will be near Wild World Amusement Park. Liz and Malcolm want to plan a stop there. They consider several variables that affect their costs and the time they can spend at Wild World.

* What variables might be involved in planning for their stop to Wild World?
* How are these variables related to each other?

Malcolm finds out that it costs $21 per person to visit Wild World. Liz suggests they make a table relating the admission price to the number of people.

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_\_\_\_\_

**Lesson 3.1 pages 49-51** (Calculators permitted)

The riders visited Wild World and the tour is over. They put their bikes and gear into vans and head back to Atlantic City, 320 miles away. On their way back, they try to calculate how long the drive home will take. They use a table and a graph to estimate their travel time for different average speeds.

Complete the table:

|  |  |  |  |
| --- | --- | --- | --- |
| Time(hr) | Distance for SpeedOf 50 mi/h | Distance for Speed of 55 mi/h | Distance for Speed of 60 mi/h |
| **0** | 0 |  |  |
| **1** | 50 |  |  |
| **2** | 100 |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **6** |  |  |  |

Complete the graph for all three speeds above. Use a different color for each speed. Be sure to make a KEY.



C. Do the following for each of the three average speeds:

1. Look for patterns relating distance and time in the table and graph. Write a rule in words for calculating the distance traveled in any given time.

2. Write an equation for your rule, using letters to represent the variables.

3. Describe how the pattern of change shows up in the table, graph, and equation.

D. For each speed, (50, 55, and 60mph) tell how far you would travel in the given time. Explain how you can find each answer by using the table, the graph, and the equation.

1. 3 hours 2. 4 ½ hours 3. 5 ¼ hours

E. For each speed, find how much time it will take the students to reach these cities on their route:

1. Atlantic City, New Jersey, about 320 miles from Norfolk

2. Baltimore, Maryland, about ¾ of the way from Norfolk to Atlantic City.