$\qquad$ Class $\qquad$
Travel at Different Speeds Lesson 3.2AB pg 69
When the bike tour is over, the riders will put their bikes and gear into vans and head back to Atlantic City.
Complete the rate table to show how distance depends on time for different average speeds.
Distance Traveled at Different Average Speeds

| Time (h) | Distance for Speed of $50 \mathrm{mi} / \mathrm{h}$ | Distance for Speed of $55 \mathrm{mi} / \mathrm{h}$ | Distance for Speed of $60 \mathrm{mi} / \mathrm{h}$ |
| :---: | :---: | :---: | :---: |
| RULE |  |  |  |
| 0 | 0 |  |  |
| 1 | $50$ |  |  |
| 2 | $100$ |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| Equation |  |  |  |

Write an equation to show how distance $\boldsymbol{d}$ and time $\boldsymbol{t}$ are related for travel at each speed.

- 50 miles per hour $\qquad$
- 55 miles per hour $\qquad$
- 60 miles per hour $\qquad$

Graph the (time, distance) data for all three speeds on the coordinate grid below.
Use a different color for each speed.


## Smartphone Monthly Charges pg70 B

A smartphone plan charges $\$ .03$ per text message. Complete the table of monthly charges for 0 : 500; 1,000; 1,500; 2,000; and 2,500 text messages.

## Smartphone Monthly Charges

| Number of <br> Text <br> Messages | 0 | 500 | 1,000 | 1,500 | 2,000 | 2,500 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost |  |  |  |  |  |  |

Use the table. What is the cost for 1,000 messages? $\qquad$ For 1,725? $\qquad$

Use the table. How many text messages were sent in a month if the charge for the messages is: \$75? $\qquad$ \$60? \$18? $\qquad$

How is the monthly charge $B$ for text messages related to the number of text messages $n$ ?

Write an equation that represents the monthly charge for $n$ messages.

Use the equation you wrote above to find the cost for 1,250 text messages in one month.

Sketch a graph of the relationship between text message charges and number of messages.

