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### 2.1 Renting Bicycles - Analyzing a Table and a Graph

Rocky's Weekly Rental Rates for Bikes

| Number <br> of Bikes | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rental Fee | $\$ 400$ | $\$ 535$ | $\$ 655$ | $\$ 770$ | $\$ 875$ | $\$ 975$ | $\$ 1,070$ | $\$ 1,140$ | $\$ 1,180$ | $\$ 1,200$ |


A. Which Bike Shop should Ocean Bike Tours use Explain.
B. Suppose you make a graph from the table for Rocky's Cycle Center. Would it make sense to connect the points? Explain.
C. How much do you think each company charges to rent 32 bikes?
D. 1. What Patterns do you find in the table and in the graph?
2. Bawed on the patterns you found in part(1), how can you predict values that are not included in the table or graph?
E. 1. Describe a way to find the costs for renting any number of bikes from Adrian's Bike Shop.
2. Describe a way to find the costs for renting any number of bikes from Rocky's Cycle Center.
[HW05 -
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### 2.2 Finding Customers - Making and Analyzing a Graph

A. To make a graph of these data, which variable would you put on the "x" axis? $\qquad$

Which variable would you put on the " $y$ " axis? $\qquad$
B. Make a coordinate graph of the data on grid below. BE SURE TO LABEL EVERYTHING!

| Price Customers <br> Would Pay |  |
| :--- | :---: |
| Total Price Number of <br> Customers <br> $\$ 150$ 76 <br> $\$ 200$ 74 <br> $\$ 250$ 71 <br> $\$ 300$ 65 <br> $\$ 350$ 59 <br> $\$ 400$ 49 <br> $\$ 450$ 38 <br> $\$ 500$ 26 <br> $\$ 550$ 14 <br> $\$ 600$ 0 |  |


C. Based on your graph or table, what price do you think the tour operators should charge? Explain.
D. 1. The number of people who say they would take the tour depends on the price. How does the number of potential customers change as the price increases?
2. How is the change in the number of potential customers shown in the table? How is the change shown on the graph?
3. Describe a way to find the number of potential customers for a price between two prices in the table. For example, how can you predict the number of customers for a price of $\$ 425$ ?
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### 2.3 What's the Story - Interpreting Graphs

A. The number of students who go on a school trip is related to the price of the trip for each student.

Independent variable - $\qquad$ Graph - $\qquad$

Dependent variable - $\qquad$
Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
B. When a skateboard rider goes down one side of a half-pipe ramp and up the other side, her speed changes as time passes.

Independent variable - $\qquad$ Graph - $\qquad$
Dependent variable - $\qquad$
Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
C. The water level changes over time when someone fills a rub, takes a bath, and empties the tub.

Independent variable - $\qquad$ Graph - $\qquad$
Dependent variable - $\qquad$

Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
$\qquad$
D. The waiting time for a popular ride at an amusement park is related to the number of people in the park.

Independent variable - $\qquad$ Graph - $\qquad$

Dependent variable - $\qquad$

Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
E. The number of hours of daylight changes over time as the seasons change.

Independent variable - $\qquad$ Graph - $\qquad$

Dependent variable - $\qquad$

Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
F. Weekly attendance at a popular movie changes as time passes from the date the movie first appears in theaters.

Independent variable - $\qquad$ Graph - $\qquad$
Dependent variable - $\qquad$

Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
$\qquad$
G. The number of customers at an amusement park with water slides is related to the predicted high temperature.

Independent variable - $\qquad$ Graph - $\qquad$

Dependent variable - $\qquad$

Explain what the graph tells about the relationship of the variables.

Title for the Graph $\qquad$
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