Name Hour

## Variables and Patterns Lesson 2.1 pages 30-31

## Rocky's Weekly Rental Rates for Bikes

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

Adrian's Bike Shop sends a graph of their weekly rental fees. Because the rental fee depends on the number of bikes, they put the number of bikes on the $x$-axis.

A) Which bike shop should Ocean Bike Tours use? $\qquad$ EXPLAIN:

Adrian's Weekly Rental Rates for Bikes

B. Does it make sense to connect the points on the graph? Why or why not?

| Per Bike @ Rocky's | Rocky's Fee | \# of Bikes | Adrian's Bike | Per Bike @ Adrian's |
| :--- | :--- | :--- | :--- | :--- |
|  | $\$ 400$ | 5 | $\$$ |  |
|  | $\$ 535$ | 10 | $\$$ |  |
|  | $\$ 655$ | $\mathbf{1 5}$ | $\$$ |  |
|  | $\$ 770$ | 20 | $\$$ |  |
|  | $\$ 875$ | 25 | $\$$ |  |
|  | $\$ 975$ | $\mathbf{3 0}$ | $\$$ |  |
|  | $\$ 1070$ | 35 | $\$$ |  |
|  | $\$ 1140$ | 40 | $\$$ |  |
|  | $\$ 1180$ | 45 | $\$$ |  |
|  | $\$ 1200$ | 50 | $\$$ |  |
|  |  |  |  |  |

C. How much do you think each company charges to rent 32 bikes? (Show your thinking)

32 Bikes at Rocky's :
32 Bikes at Adrian's:
D. 1) What patterns do you find in the table and in the graph?

D 2) Based on the patterns found, how can you predict values that are not included in the table or graph?

E1) Describe a way to find the costs for renting any number of bikes from Adrian's Bike Shop.

E2) Describe a way to find the costs for renting any number of bikes from Rocky's Cycle Center.

