B32a Jet Ski Rental—Activity 1

You are at Galveston for a week-long gathering. Members of your family want to rent a jet ski. It will cost $30.00 for a deposit plus $45.00 per hour. How long can you rent the jet ski if your family has budgeted $350 for the rental fee?

Number of Hours	**Process** (Total Cost in Dollars)	**Total Cost in Dollars**
1	45(1) + 30	75
2		
3		
4		
5		
x		

a. Study the table for patterns and state any observations.

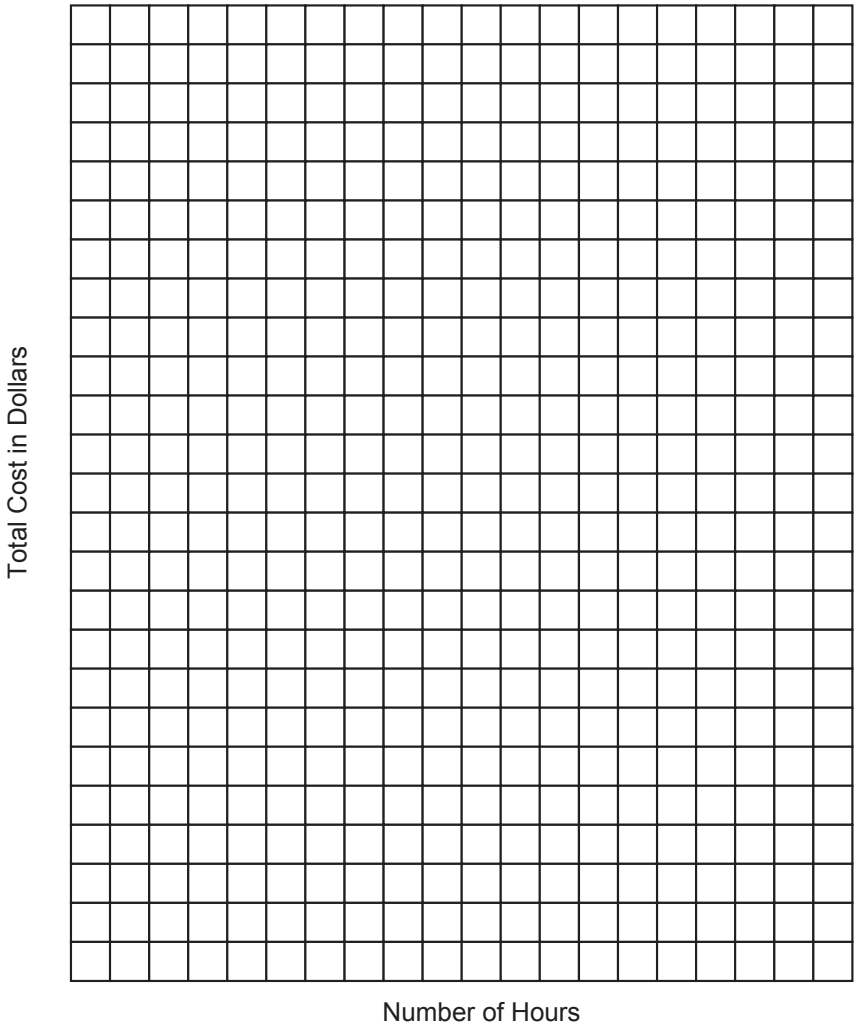
b. Compare the total cost to the number of hours for each row of the table. Is there a set of equivalent ratios?

c. How can you use this information to help you determine if the jet ski rental situation is a proportional relationship?

d. Write an equation that relates the total cost, *y*, and the number of hours, *x*.

e. How can you determine if this jet ski rental situation is a proportional relationship by looking at the equation?

B32b Jet Ski Rental—Transparency 1



a. What is the cost of rental at 0 hours? What does this mean?

b. What does the ordered pair (6, 300) on the graph mean in words?

c. How many hours can your family rent the jet ski if they have budgeted $350? Explain.

d. Use your graph to determine the cost to rent the ski for 13 hours over a 2-day period.

e. Is it reasonable to pay $400 for renting the jet ski for 8 hours on one day? Explain your reasoning.

f. Does this graph represent a proportional relationship? Why or why not?

B33a Jet Ski Rental—Activity 2

You are at Galveston for a week-long vacation. Members of your family want to rent a jet ski. It will cost $45.00 per hour. How long can you rent the jet ski if your family has budgeted $350 for the rental fee?

Number of Hours	**Process** (Total Cost in Dollars)	**Total Cost in Dollars**
1	45(1)	45
2		
3		
4		
5		
x		

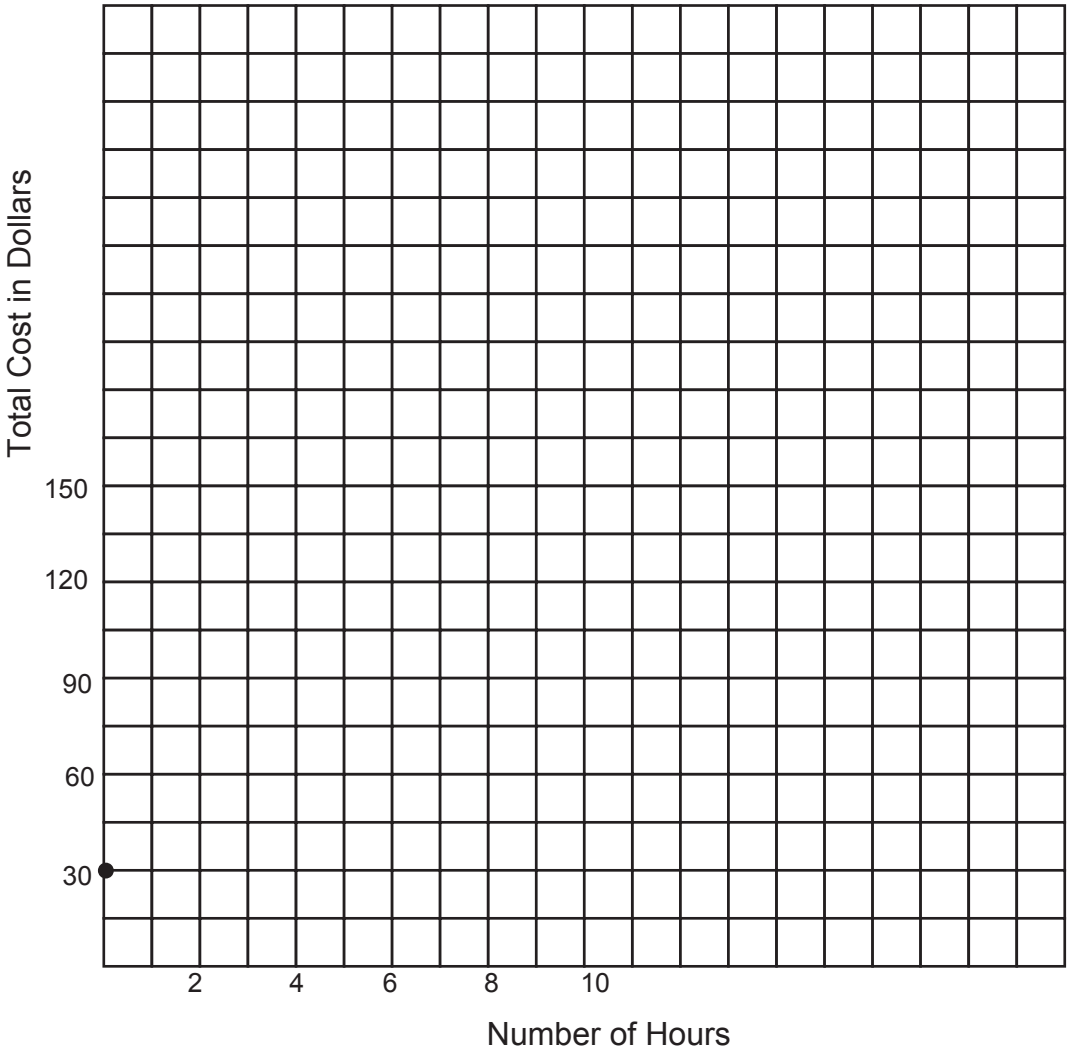
a. Compare the ratio of Total Cost, *y*, to Number of Hours, *x*, for each row of this table and state your observations.

b. How can you use this information to help you determine if this is a proportional relationship?

c. Write an equation using the “process column” in your table.

d. How can you recognize a proportional relationship from an equation?

e. How many hours can you rent the jet ski on a budget of $350? Explain.



Graph the ordered pairs from the table of values in Activity 2 on the grid below.

a. What does the ordered pair (0, 0) mean in words in this problem?

b. What is the cost to rent the jet ski for 7 hours?

c. How many hours could your family rent the ski with no deposit on a budget of $350?

d. Did the deposit make any difference in the number of hours you could rent the jet ski on a budget of $350? Explain.

e. Does this graph represent a proportional relationship? Why or why not?