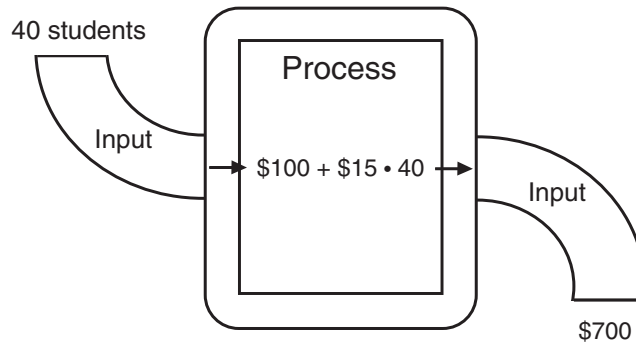


Activity 1

- The school choir is planning a trip to Ocean Universe. The bus costs \$100 to rent and seats 60 people. Tickets to Ocean Universe cost \$15 each. A function machine can be used to compute the total cost of the trip.



Use mental math to complete the table below

Input	Process	Output
Number of Students		Total Cost
10		
20		
30		
40		
50		
N		



- a. Can you have an input value of 70? Explain your reasoning.
- b. Make a list of input values that make sense in this situation.
- c. Write a sentence and a function rule describing the total cost of the trip in terms of the number of students going. Use a calculator table to confirm your rule.
- d. Write an equation for the following problem: The choir raised only \$775 for the trip. How many people can go to Ocean Universe? Solve by guess and check.
- e. Use a graphing calculator table created from your rule to find the solution for 1d.



Making Connections

Activity 1 (continued)

2. LMN Internet charges \$10 per month plus \$0.25 per hour for Internet access. Your conscience says, “No more than one hour per day!” and you always listen to your conscience. Build a table to show possible costs.

Input	Process	Output
		Total Cost

- a. Identify the input and output variables and label them in your table.
- b. What input values make sense in this problem?



- c. Write a sentence and a function rule describing the monthly cost in terms of the hours used. Use a calculator table to confirm your rule.
- d. Write an equation for the following problem: Your Internet service bill is \$15.75. For how many hours of use were you charged?
- e. Use a graphing calculator table created from your function rule to find the solution for 2d.

