### Lesson 4 Practice Problems

1. Match each equation with a description of the function it represents.
	1. To get the output, add 4 to the input, then multiply the result by 2.
	2. To get the output, add 2 to the input, then multiply the result by 4.
	3. To get the output, multiply the input by 2, then add 4 to the result.
	4. To get the output, multiply the input by 4, then add 2 to the result.
2. Function  represents the perimeter, in inches, of a square with side length inches.
	1. Complete the table.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | * + 0
 | * + 1
 | * + 2
 | * + 3
 | * + 4
 | * + 5
 | * + 6
 |
|  |  |  |  |  |  |  |  |

* 1. Write an equation to represent function .
	2. Sketch a graph of function .
	+ 
1. Functions and are defined by these equations.
* Which function has a greater value when is 2.5?
1. An equilateral triangle has three sides of equal length. Function gives the perimeter of an equilateral triangle of side length .
	1. Find
	2. Find
	3. Find
2. Imagine a situation where a person is using a garden hose to fill a child's pool. Think of two quantities that are related in this situation and that can be seen as a function.
	1. Define the function using a statement of the form “ is a function of . Be sure to consider the units of measurement.
	2. Sketch a possible graph of the function. Be sure to label the axes.
	* Then, identify the coordinates of one point on the graph and explain its meaning.
	* 
* (From Unit 4, Lesson 1.)
1. Function gives the cost, in dollars, of buying apples.
* Which statement best represents the meaning of ?
	1. The cost of buying 9 apples
	2. The cost of 9 apples is $10.
	3. The cost of 10 apples
	4. Ten apples cost $9.
* (From Unit 4, Lesson 2.)
1. Diego is baking cookies for a fundraiser. He opens a 5-pound bag of flour and uses 1.5 pounds of flour to bake the cookies.
* Which equation or inequality represents , the amount of flour left in the bag after Diego bakes the cookies?
* (From Unit 2, Lesson 18.)



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