## TRS 92: Function Notation and Multiple Representations

For \#1-7: A plumber charges $\$ 40$ for a house call, and $\$ 25$ for each hour she works to repair the problem.

1. What do you think would be the independent variable in this case? Identify this variable with a letter and a unit of measurement.
2. What do you think would be the dependent variable in this case? Identify this variable with a letter and a unit of measurement.
3. Create a graph and table of values with 5 different inputs. Label both the graph and the table appropriately.


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4. Write an equation to represent this situation using function notation.
5. Is this relation a function? Why or why not?
6. Use your equation to find the charge for 12 hours.
7. Fill in the blanks in the following statement for this relation:
$\qquad$ is a function of $\qquad$ .
8. Using the information from the graph to the right, identify the variables.

9. Using the graph, fill in the table.

| Time worked in days | 0 |  | 4.5 |  | 7.5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Amount earned in \$ |  | 100 |  | 325 |  |

10. Write a verbal description that fits the data in the graph.
11. Write an equation for the situation using function notation (and the variables you defined).
12. Fill in the blanks in the following statement for this relation:
$\qquad$ is a function of $\qquad$ .
