**Function Applications – Travel Time**

Leon’s relatives all had to travel 150 miles to Grandma’s home, but they each travelled different amounts of time. **Create a function that models** the travel time ***t*** (in hours) based on the velocity ***v*** (in miles per hour) that a relative travelled.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Independent variable:
2. Dependent variable:
3. Write the equation for this function:
4. Use function notation to express the function:
5. We can say \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a

function of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.1. Find the travel time of Uncle Jim who travelled at 60 mph. Use function notation.

 1. Find the velocity of Cousin Tina who took 4 hours

to get to Grandma’s. 1. What are the domain and range of this function?
 |  Complete the table below:

|  |  |  |
| --- | --- | --- |
| **Relative** | **Velocity (mph)** | **Travel Time****(hours)** |
| Great Grandpa | 30 |  |
| Aunt Violet | 45 |  |
| Uncle Harry | 60 |  |
| Cousin Will | 75 |  |

Graph the function on the axes below. Scale and label the axes. C:\Users\TRAVEL\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\G5RXD1SG\highway version c.png |

1. Identify the shape of this graph using the Parent Function Reference Sheet.