unit • 2 teacher support / handout 4 pg. 1

**The Cab Fare Problem**

Three friends used the same taxi service to meet at a restaurant for dinner. When they arrived at the restaurant, they compared their cab fare and tried to figure out a rule that the taxi company used to calculate cost.

* Denise’s trip was only 1 mile and her total cost was $4.50.
* Mark said that his trip was 6 miles, and his total cost was $12.00
* Solange’s trip was 3 miles, and her total cost was $7.50
* Kate’s trip was 8 miles, and her total cost was $15.00.

## Complete the table below for the three passengers.



**1**

|  |  |  |  |
| --- | --- | --- | --- |
| Passenger | Distance | Cost | Coordinate |
| Denise |  |  |  |
| Solange |  |  |  |
| Mark |  |  |  |
| Kate |  |  |  |

Plot Denise, Mark, Solange, and Kate’s costs in the graph below, then draw a line that connects the four coordinates.



**2**

THE CUNY HSE CURRICULUM FRAMEWORK • MATH UNIT 2: THREE VIEWS OF A FUNCTION 67

unit • 2 teacher support / handout 4 pg. 2

**Cost**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# Miles Traveled

## What would be the total cost for a passenger who travels 10 miles?



**3**

The taxi company charges a base fee and a fee for each mile traveled. What is the base fee, and what is the cost per mile?



**4**

68 UNIT 2: THREE VIEWS OF A FUNCTION THE CUNY HSE CURRICULUM FRAMEWORK • MATH