

The Cab Fare Problem

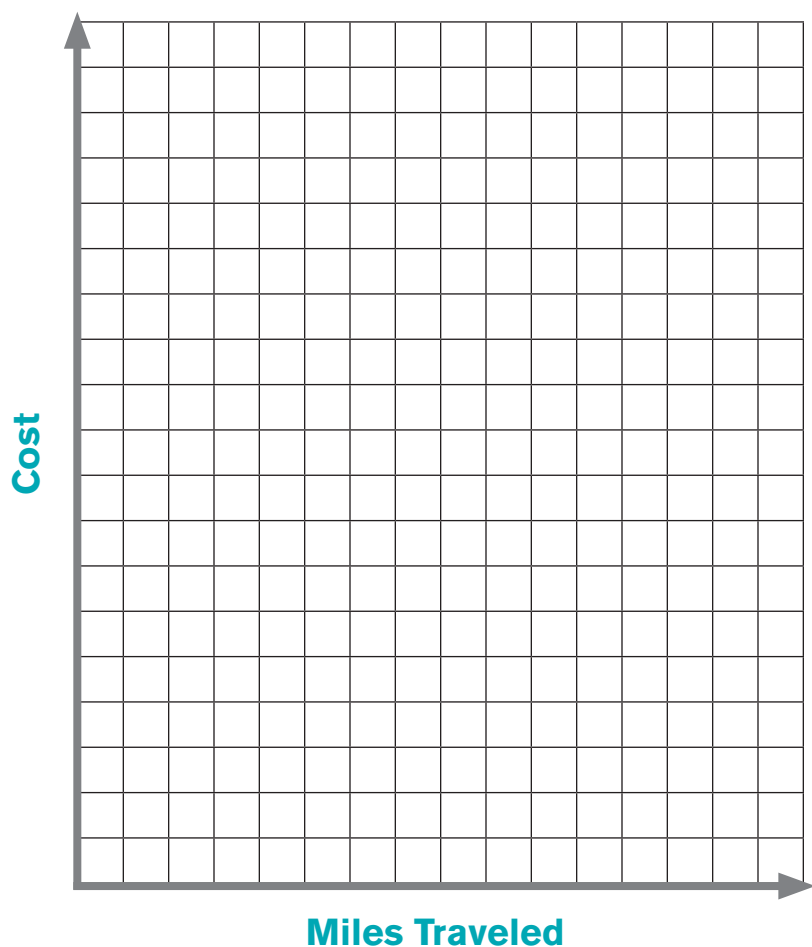
Three friends used the same taxi service to meet at a restaurant for dinner. When they arrived at the restaurant, they compared their cab fare and tried to figure out a rule that the taxi company used to calculate cost.

- 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.

1 Complete the table below for the three passengers.

Passenger	Distance	Cost	Coordinate
Denise			
Solange			
Mark			
Kate			

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



- 3 What would be the total cost for a passenger who travels 10 miles?
- 4 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?