**Taxi Cab Problem – Practice Test Versions**

Four 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.

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| **Passenger** | **Distance  (in miles)** | **Cost** |
| Denise | 1 | $4.50 |
| Mark | 6 | $12 |
| Solange | 3 | $7.50 |
| Kate | 8 | $15 |

1. Which linear function models the relationship between the number of miles driven, *m*, and the cost of the cab ride, *C*?
   1. *C* = 4.5*m*
   2. *C* = 2.5*m*
   3. *C* = 1.5*m* + 3
   4. *C* = 3*m* + 1.50
2. Which linear function models the relationship between the number of miles driven, *m*, and the cost of the cab ride, *C(m)*?
   1. *C(m)* = 4.5*m*
   2. *C(m)* = 2.5*m*
   3. *C(m)* = 1.5*m* + 3
   4. *C(m)* = 3*m* + 1.50

Four 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 figured out they could calculate the cost of a ride using the following function: *C* = 1.5*m* + 3, where *m* is the number of miles traveled and *C* is the cost of the ride.

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| **Passenger** | **Distance  (in miles)** | **Cost** |
| Denise | 1 | $4.50 |
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1. Which statement is true about the cab fare?
   1. The ride costs $4.50 for each mile.
   2. The ride costs $3.00 for each mile driven plus $1.50
   3. For each 10 miles driven, the cab ride costs $18.00
   4. The ride costs $1.50 for each mile plus a flat fee of $3.00
2. Halfway through the meal, Isabel arrives. She used the same taxi service and paid $22.50 for the ride.

What distance did she travel?

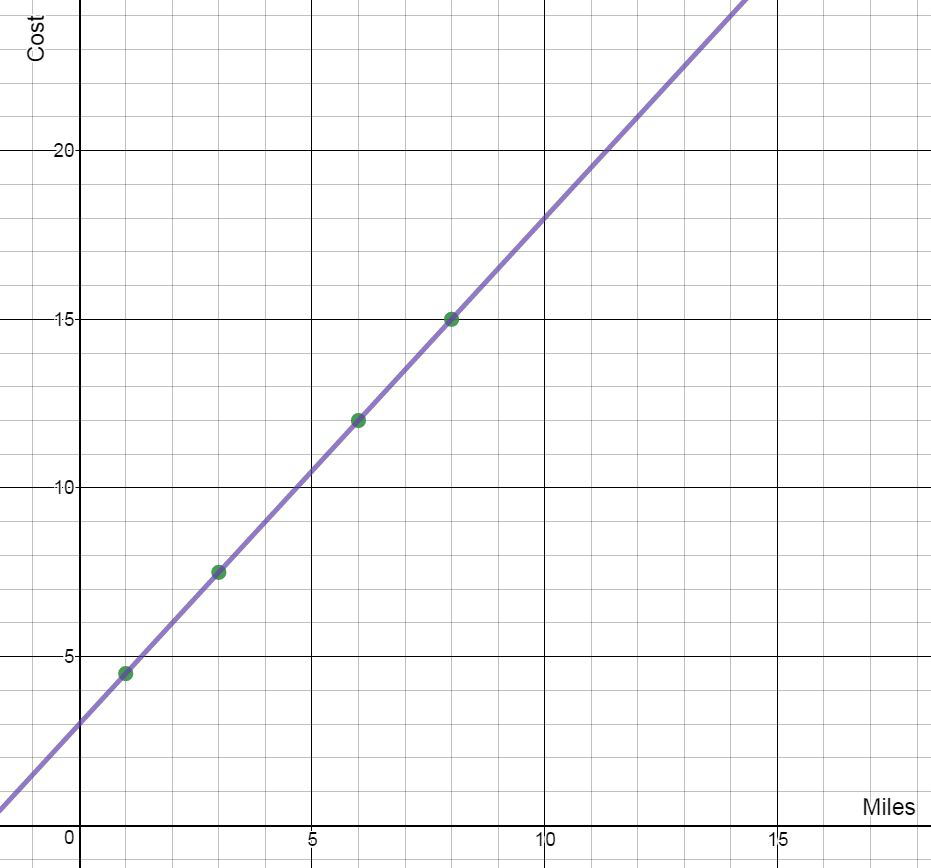
1. A taxi company uses the function *C(m)* = 1.5*m* + 3 to calculate the cost of a taxi ride.

* *C(m)* is the total cost (in dollars) of the ride
* *m* is the number of miles traveled

What do the values 1.5 and 3 represent in the function?

* 1. The cost to ride a taxi 3 miles is $1.50.
  2. The cost to ride a taxi 1.5 miles is $3.00.
  3. The cost of a taxi is $1.50 plus $3.00 per mile.
  4. The cost of a taxi is $3.00 plus $1.50 per mile.

1. Four friends used the same taxi service to meet at a restaurant for dinner. The graph to the right shows the distance traveled, in miles, and the cost of each friends’ ride.



If C is the cost of a ride that is m miles, which function can be used to calculate the cost of a taxi ride?

* 1. C = 4.5m
  2. C = 2.5m
  3. C = 1.5m + 3
  4. C = 3m + 1.50

1. How much would it cost to ride for 10 miles?