

Mini-Assessment MA.912.A.2.3

Name: _____ Date: ____/____/____ Period: _____

1. The Yellow Cab Company charges \$4.25 for the first half mile and then by the mile as shown in the table below.

YELLOW CAB COMPANY	
Miles (m) (after the first half mile)	Total Cost (t)
1	7.25
2	10.25
3	13.25
4	16.25
5	19.25

Which equation represents c , the cost per mile as a function of t , the total cost, where m is the number of miles driven after the first half mile?

- A. $c = \frac{t + 4.25}{m}$
- B. $c = \frac{t - 4.25}{m}$
- C. $c = \frac{m - 4.25}{t}$
- D. $c = \frac{m \div 4.25}{t}$

2. Tri-Americas Airlines charge \$280 for a one way ticket from Miami, FL to Lima, Peru and \$25 per bag of luggage checked on the plane. The function below can be used to determine $f(n)$, the ticket price and the luggage surcharge, where n represents the number of bags of luggage checked.

$$f(n) = 280 + 25n$$

If the total cost of a round trip cost \$660, how many bags of luggage were checked onto the plane each way?

- F. 2
- G. 4
- H. 6
- I. 8

3. As an Indy race car races laps around the track, the methanol burned as fuel increases. The table below shows the amount of methanol used for the number of laps raced.

Indy Race Cars	
Number of Laps Raced (L)	Gallons of Methanol Used (g)
10	6.6
20	13.2
30	18.8
40	26.4
50	33

Which equation represents g , the gallons of methanol used, as a function of L , number of laps raced?

- A. $g = 6.6L$
- B. $g = 0.66L$
- C. $g = \frac{0.66}{L}$
- D. $g = \frac{6.6}{L}$

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4. For one child, the South Florida Fair charges \$12.75 for admission and \$1.25 for each ride the child takes. The function below can be used to determine $f(r)$, the spent for a child at the fair, where r represents the number of rides taken.

$$f(r) = 12.75 + 1.25r$$

If the total cost for one child at the fair for the day was \$22.75, how many rides did the child take?

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5. For one child, a summer camp charges \$140 per week and \$5.50 per hour for each hour a child spends in extended camp time. The function can be used to determine $f(h)$, the weekly fee for summer camp and extended camp, where h represents the number of hours spent in extended camp time.

$$f(h) = 140 + 5.5h$$

If the weekly charges for one child totaled \$195.00, what was the total number of hours the child spent in extended camp?

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