

## Topic No. 07



#1

8.EE.8

### Question 11

Jenny wants to rent a truck for one day. She contacted two companies. Laguna's Truck Rentals charges \$20 plus \$2 per mile. Salvatori's Truck Rentals charges \$3 per mile. After how many miles will the total cost for both companies be the same?

- A 4
- B 6
- C 20
- D 60

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### Question 12

Bert's cab company charges \$1.00 plus an additional \$3.00 per mile for a ride. Madeline's cab company charges \$3.00 plus an additional \$2.00 per mile for a ride. Write a system of linear equations that shows the cost in dollars,  $y$ , for a cab ride of  $x$  miles for each cab driver.

**Bert's** \_\_\_\_\_

**Madeline's** \_\_\_\_\_

At what distance, in miles, will the cost be the same for both companies?

**Show your work.**

**Answer** \_\_\_\_\_ miles

Which cab driver's charge will be less for a ride that is 10 miles in distance?

**Answer** \_\_\_\_\_

Use words and numbers to explain how you determined your answer.

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#1

8.EE.5

## Question 13

The table shown below was posted on the wall at Andy's Hardware to show the price of varying lengths of chain-link fencing.

PRICE OF FENCING

Length (feet)	Price
75	\$168.75
125	\$281.25
175	\$393.75
225	\$506.25

The price of the same fencing at Bargain Hardware can be determined by the equation  $y = 2.50x$ , where  $y$  is the price, in dollars, for  $x$  feet of fencing.

Determine the unit price for fencing, in dollars per foot, for each store.  
*Show your work*

**Answers** Andy's Hardware \$\_\_\_\_\_ per foot

Bargain Hardware \$\_\_\_\_\_ per foot

On the grid below, graph for each store the relationship between the length of the fencing and the price to verify your answers. Be sure to label each line.

