8.4 Multiple Representations of Functions (6.EE.9)

Key

Multiple Representations

Functions can be represented using:

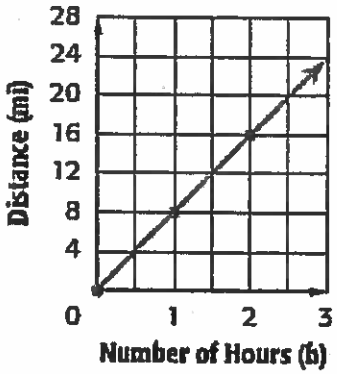
1.) Words: A runner's distance in a marathon is equal to 8 miles per hour times the number of hours.

2.) Equation: $d = 8t$

3.) Table:

Time (h)	Distance (mi)
0	0
1	8
2	16

4.) Graph:



Guided Practice

Words: The school cafeteria sells lunch passes that allow a student to purchase any number of lunches in advance for $3 per lunch.

a.) Write an equation to find "t", the total cost in dollars for a lunch pass with "n" lunches.

$n \cdot 3 = t$ $3n = t$

b.) Make a function table to show the relationship between the number of lunches "n" and cost "t."

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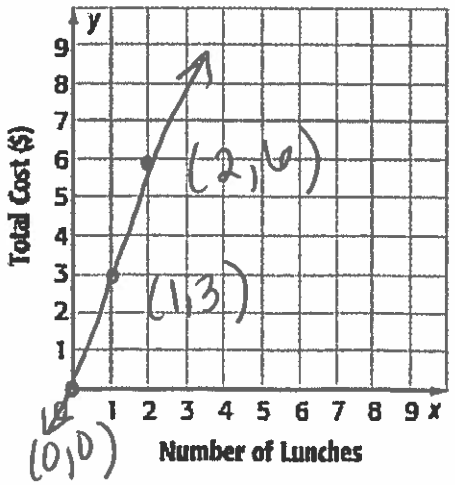
Number of Lunches, n	0	1	2
Total Cost ($), t	0	3	6

c.) Graph the ordered pairs. Analyze the graph.



The graph is a line because every lunch costs $3.

Partner Talk
An African elephant eats 400 pounds of vegetation each day. Write an equation to find "v," the number of pounds of vegetation an African elephant eats in "d" days.

days	0	1	2
veg.	0	400	800

$400 \cdot d = v$

$400d = v$

Building on the Essential Question – Why do you represent functions in different ways?

to be able to analyze the relationship in different representations

Rate Yourself – Are you ready to move one? Shade the section that applies.