

Lesson 7 Practice Problems

1. The equation and the tables represent two different functions. Use the equation $b = 4a - 5$ and the table to answer the questions. This table represents c as a function of a .

a	-3	0	2	5	10	12
c	-20	7	3	21	19	45

- When a is -3, is b or c greater?
- When c is 21, what is the value of a ? What is the value of b that goes with this value of a ?
- When a is 6, is b or c greater?
- For what values of a do we know that c is greater than b ?

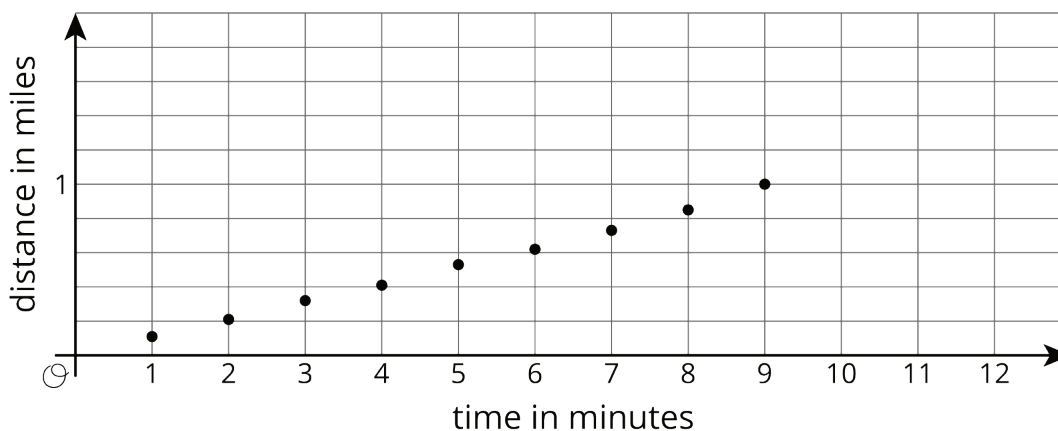
2. Elena and Lin are training for a race. Elena runs her mile at a constant speed of 7.5 miles per hour.

Lin's total distances are recorded every minute:

time (minutes)	1	2	3	4	5	6	7	8	9
distance (miles)	0.11	0.21	0.32	0.41	0.53	0.62	0.73	0.85	1

a. Who finished their mile first?

b. This is a graph of Lin's progress. Draw a graph to represent Elena's mile on the same axes.



c. For these models, is distance a function of time? Is time a function of distance? Explain how you know.

3. Match each function rule with the value that could not be a possible input for that function.

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|---|-------|
| A. 3 divided by the input | 1. 3 |
| B. Add 4 to the input, then divide this value into 3 | 2. 4 |
| | 3. -4 |
| C. Subtract 3 from the input, then divide this value into 1 | 4. 0 |
| | 5. 1 |

(From Unit 5, Lesson 2.)

4. Find a value of x that makes the equation true. Explain your reasoning, and check that your answer is correct.

$$-(-2x + 1) = 9 - 14x$$

(From Unit 4, Lesson 4.)