

Name:

Date:

Understand the functional relationships between two linear functions with the same representation.

Directions: Write a linear equation (in any form) to model the situation below. Then, fill in the table and create a graph.

1) A pool is being emptied at a rate of 5 cubic meters per hour. It currently holds 15 cubic meters.

X	Y

2) Elie received a sum of money for her birthday, which she spent at a rate of \$2 a day until she ran out of money. She started with \$42.

X	Y

3) Eric works at a store from 4pm to 7pm, 5 days this week. His hourly salary is \$4. For the first two days Eric was an apprentice and did not receive any pay.

X	Y

4) Robertson's Chocolate Shop sells chocolate by weight, but you must buy at least 100 grams. The first 100 grams of chocolate cost \$2, and each additional 100 grams cost \$1.50.

X	Y

5) Lee took a cab to the zoo. The company charges a fixed rate of \$ 3.50 per ride. It also charges an additional \$0.50 per mile.

X	Y

6) The Hernandez family spends \$45 a year on a BJ's membership. Then they spend an extra \$37 dollars a week on household items.

X	Y

7) Reggie reserved a hotel room for \$100. He then had to pay \$27 per hour that he used the room.

X	Y

8) The Beckman Chocolate Shop put up a sign: We sell 20 grams of chocolate at \$5, and each additional 10 grams cost \$2.

X	Y

9) Mrs. Knowlton bought a new indoor plant, intending to keep this one alive. When she bought it the plant was 5cm tall and it grew at a rate of 3 cm per day.