Algebra IA
Unit 4 Worksheet 8
Interpreting slope and y-intercept – Part 2   Name _____

1. The function below shows the cost of a hamburger with different numbers of toppings (t).

    f(t) = 1.90 + 1.40t
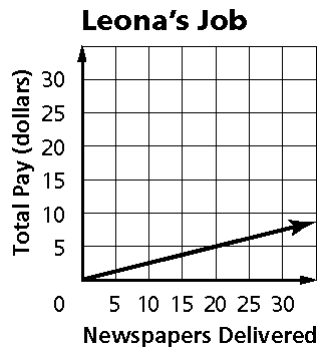
a. What is the y-intercept, and what does it mean?

b. What is the slope, and what does it mean?

c. If Jodi paid $3.30 for a hamburger, how many toppings were on Jodi's hamburger?

2. The function below shows the cost of an ice cream sundae with different numbers of toppings (t).

    f(t) = 2.25 + 0.75t

a. What is the y-intercept, and what does it mean?

b. What is the slope, and what does it mean?

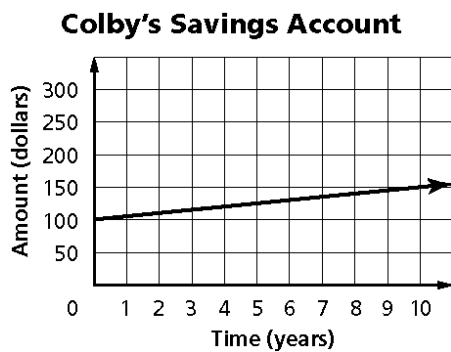c. If Kaye paid $6.00 for a sundae, how many toppings were on Kaye's sundae?

5. The graph below shows the number of newspapers delivered and total pay for Leona'
newspaper delivery job. What does the slope of this graph represent?

Leona's Job

Total Pay (dollars): 30 25 20 15 10 5

Newspapers Delivered: 0 5 10 15 20 25 30

6. Dionne pays a fixed fee plus an hourly rate to rent a boat. The table below shows how
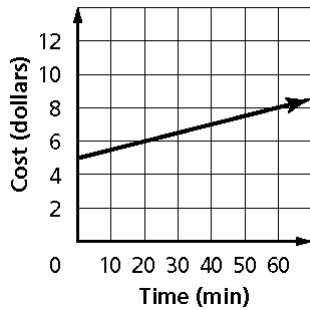much Dionne paid for the boat. What was Dionne's hourly rate to rent the boat?

Dionne's Boat Rental					
Hours Rented	1	2	3	4	5
Amount Paid	$27	$39	$51	$63	$75

7. Colby put $100 in a savings account. The graph below shows how the amount in the
account would increase over the next ten years. What does the y-intercept represent?

Colby's Savings Account

Amount (dollars): 300 250 200 150 100 50

Time (years): 0 1 2 3 4 5 6 7 8 9 10

8. Tara pays a base rate for her long distance phone service plus a per-minute charge. The graph below shows what she would pay for her long distance phone service for the first 60 minutes. What does the y-intercept of this graph represent?

Long Distance Service

9. Rich is a number of a gym. He pays a monthly fee plus a per-visit fee. The equation below represents the monthly amount Rich pays for his membership to the gym per month for x visits.

$$y = 3x + 10$$

What does the y-intercept of the graph of this equation represent?

10. Nan works as a commissioned sale rep. She makes a weekly base salary plus a commission for each sale she makes. The table below shows how much Nan can make. What is Nan's weekly base salary?

Nan's Weekly Salary					
Sales Made	1	2	3	4	5
Salary	$250	$300	$350	$400	$450