Name _____ Date _____ Class _____

LESSON

Problem Solving
2-3 *Graphing Linear Functions*

Solve

1. Nathan made a table to record the balance in his savings account every other month.

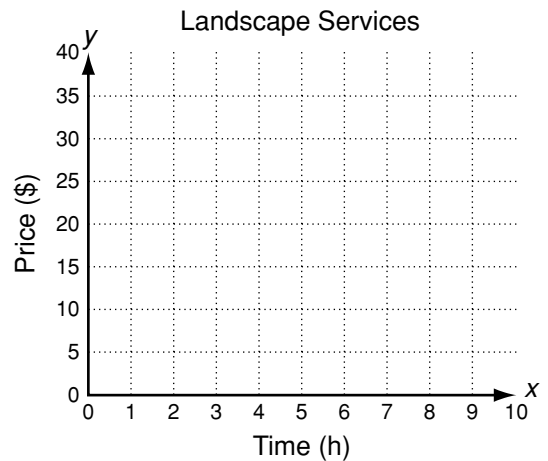| Savings Balance						
Month	2	4	6	8	10	12
Balance ($)	575	810	1025	1280	1545	1850
Difference	235	215	255	265	305	

Is this data set linear? How do you know?

_____

2. Sally runs a landscape service business. The table shows her fee schedule.

Landscape Services						
Time (h)	1	2	3	4	5	6
Price ($)	8	14	20	26	32	38
Difference		___	___	___	___	___

a. Why is the data set linear?

_____

b. Find the slope of the line that passes through the points.

_____

c. Graph the data.

d. Estimate the cost for 9 hours of landscape services.

_____

Landscape Services

Choose the letter for the best answer.

3. Jan built a skateboard ramp from her back porch to the ground. The porch is 30 inches above the ground. The ramp extends 9 feet from the base of the porch. Find the slope of the ramp.

   A 3.6   C 0.278

   B 0.3

4. When Rafiq left home his mileage read 47,823. He drove 3 h 15 min and his mileage read 48,017. Find his average speed in miles per hour.

   A 55.6   C 61.6

   B 59.7

Holt Algebra 2

Name _____ Date _____ Class _____

Problem Solving
Graphing Linear Functions

Solve

1. Nathan made a table to record the balance in his savings account every other month.

Savings Balance						
Month	2	4	6	8	10	12
Balance ($)	575	810	1025	1280	1545	1850
Difference	235	215	255	265	305	

Is this data set linear? How do you know?

No; Possible answer: the rate of change is not constant.

2. Sally runs a landscape service business. The table shows her fee schedule.

Landscape Services						
Time (h)	1	2	3	4	5	6
Price ($)	8	14	20	26	32	38
Difference	6	6	6	6	6	

a. Why is the data set linear?

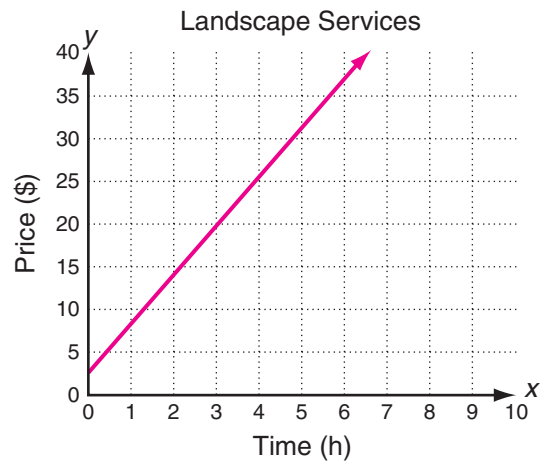**Rate of change is constant.**

b. Find the slope of the line that passes through the points.

6

c. Graph the data.

d. Estimate the cost for 9 hours of landscape services.

$56

Landscape Services

Choose the letter for the best answer.

3. Jan built a skateboard ramp from her back porch to the ground. The porch is 30 inches above the ground. The ramp extends 9 feet from the base of the porch. Find the slope of the ramp.

A 3.6   **C** 0.278

B 0.3

4. When Rafiq left home his mileage read 47,823. He drove 3 h 15 min and his mileage read 48,017. Find his average speed in miles per hour.

A 55.6   **C** 61.6

B 59.7