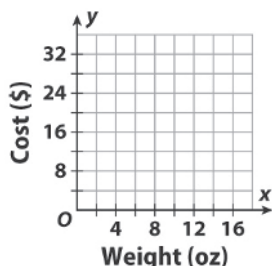


LESSON
5-2**Writing Linear Equations from a Table****Practice and Problem Solving: A/B**

Graph the data, and find the slope and y-intercept from the graph.
Then write an equation for the graph in slope-intercept form.

1.

Weight (oz), x	2	4	8	10
Cost (\$), y	12	16	24	28



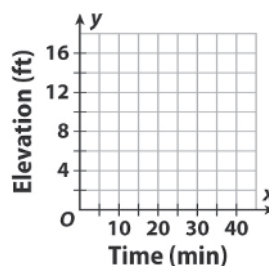
slope: _____

y-intercept: _____

equation: _____

2.

Time (min), x	5	20	30	35
Elevation (ft), y	4	10	14	16



slope: _____

y-intercept: _____

equation: _____

Write an equation in slope-intercept form that represents the data.

3.

Sales Per Day, x	0	1	2	3
Daily Pay (\$), y	100	105	110	115

equation: _____

4.

Time Since Turning Oven Off (min), x	0	5	10	15
Temperature of Oven ($^{\circ}\text{F}$), y	375	325	275	225

equation: _____

The table shows the linear relationship of the height y (in inches) of a tomato plant x weeks after it was planted.

5. Write an equation that shows the height of the tomato plant.

6. Use the equation to find the height of the tomato plant 6 weeks after it was planted.

Weeks After Planting, x	Height (in.), y
0	8
1	11
2	14
3	17

7. 0

8. $\frac{1}{2}$ or 0.5

9. $y = 0.5x$

10. Move the line up so that it begins at (0, 4) and includes (17, 12).

Reteach

1. 1.5; 0; $d = 1.5t$

2. 75; 50; $n = 75t + 50$

Reading Strategies

1. horizontal axis

2. vertical axis

3. CD and DE

4. The "rise" is 0 to 8 mph, or 8 mph, and the "run" from 2:15 P.M. to 2:18 P.M. is 3 minutes or 3. Therefore, the slope is $\frac{8}{3}$.

5. She increases her speed from 0 mph to 8 mph from point C to point D and she runs at a constant speed of 8 miles per hour from point D to point E .

6. These lines are not linear or straight, so the slope is not constant.

Success for English Learners

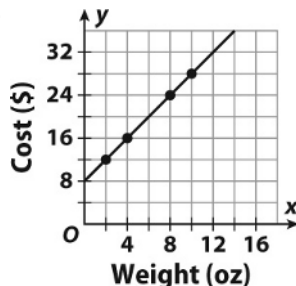
1. 3; 0; $y = 3x$

2. 6; 4; $y = 6x + 4$

LESSON 5-2

Practice and Problem Solving: A/B

1.

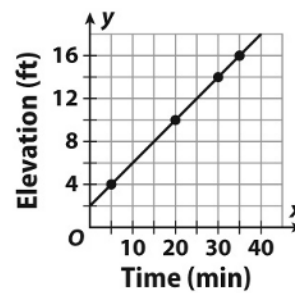


slope: 2

y-intercept: 8

equation: $y = 2x + 8$

2.



slope: 0.4; y-intercept: 2;

equation: $y = 0.4x + 2$

3. $y = 5x + 100$

4. $y = -10x + 375$

5. $y = 3x + 8$

6. 26 in.

Practice and Problem Solving: C

1.	Servings, x	0	1	2	3
	Total Cost (\$), y	70.00	70.20	70.40	70.60

$y = 0.2x + 70$

2.	Games bowled, x	1	2	3	4
	Total Cost (\$), y	4.50	6.00	7.50	9.00

$y = 1.5x + 3$

3. negative; as the time increases, the height decreases.

4. a. Gym A: $y = 20x + 50$, Gym B: $y = 25x + 30$; the slope represents the monthly cost, and the y-intercept represents the membership fee.

b. Gym A; For 10 months of membership, Gym A costs \$250 and Gym B costs \$280. So Gym A is less expensive.

Practice and Problem Solving: D

1. B

2. C

3. C

4. 8

5. $\frac{1}{4}$ or 0.25

6. 1

7. 4

8. 6

9. 15