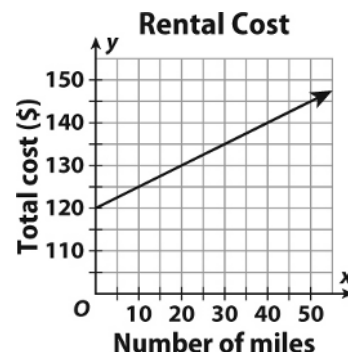


LESSON
4-2**Determining Slope and y-Intercept****Practice and Problem Solving: C**

1. The total daily cost for a rental truck based on mileage is shown.

- a. Find the cost to rent a truck for the day and the rate to use the truck for each mile.

- b. What will Amanda pay if she rents a truck and drives 45 miles and splits the total cost with two friends? Explain.



2. Some amusement park costs are shown in the table. The relationship is linear. Find and interpret the rate of change and the initial value for this situation.

Number of Rides	1	2	3	4	5
Cost (\$)	14.50	17.00	19.50	22.00	24.50

3. The amount a tutor is compensated for one-hour individual or group tutoring sessions is shown in the table. The relationship between compensation and number of sessions is linear.

Sessions	1	2	3	4	5
Group (\$)	39.50	69.00	98.50	128.00	157.50
Individual (\$)	29.50	49.00	68.50	88.00	107.50

- a. Find the rate of change and the initial value for the group sessions.

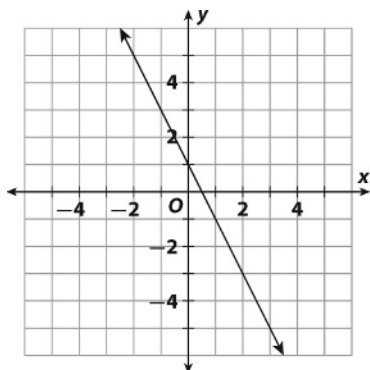
- b. Find the rate of change and the initial value for individual sessions.

- c. Compare and contrast the rates of change and initial value.

4. Miguel works for a landscaping company. He earns a fixed weekly salary of \$150 plus a fee of \$30 for each lawn he mows. At what point does Miguel begin to earn more from fees than his fixed salary? Explain.

6.

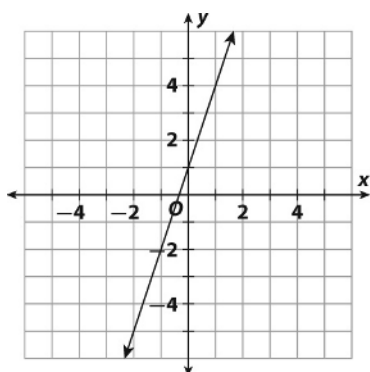
x	-2	-1	0	1	2
y	5	3	1	-1	-3



Reteach

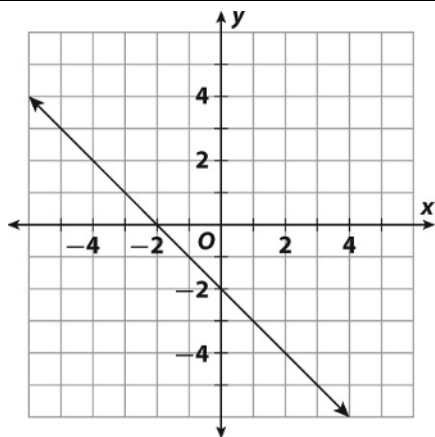
1.

x	-2	-1	0	1	2
y	-5	-2	1	4	7



2.

x	-2	-1	0	1	2
y	0	-1	-2	-3	-4



Reading Strategies

1. nonproportional; the relationship is nonproportional because each $\frac{y}{x}$ ratio is not constant.
2. proportional; the relationship is proportional because each $\frac{y}{x}$ ratio is constant.

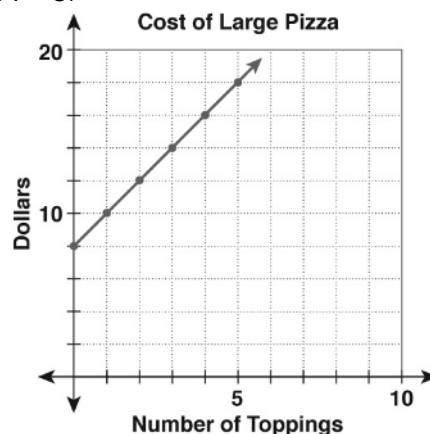
Success for English Learners

1. Every ratio $\frac{y}{x}$ will be equal.
2. The graph will be a straight line that passes through the origin.

LESSON 4-2

Practice and Problem Solving: A/B

1. 1; 3
2. $-\frac{4}{5}$; 4
3. 3; 1
4. 0.5; 1
5. The y-intercept represents the cost of a pizza with no toppings. The slope represents the rate of change (\$2 per topping).



Practice and Problem Solving: C

1. a. \$120 to rent the truck; \$0.50 per mile
b. \$47.50; $(45 \text{ miles} \times \$0.50 \text{ per mile} + \$120) \div 3 = \$47.50$
2. The rate of change is \$2.50 per ride. The initial value is \$12, which is a flat fee no matter how many rides are ridden.

3. a. The rate of change is \$29.50 per session. The initial value is \$10.
b. The rate of change is \$19.50 per session. The initial value is \$10.
c. Both rates of change are constant, but the group sessions compensate more. There is a flat fee of \$10 no matter which type of session the tutor teaches.
4. After mowing 6 lawns; Miguel earns a fixed weekly salary of \$150 plus \$30 for each lawn he mows. He earns the same in fees as his fixed salary for mowing $150 \div 30 = 5$ lawns.

Practice and Problem Solving: D

1. $-\frac{1}{2}$; 5
2. 3; 6
3. $\frac{5}{6}$; -5
4. $-\frac{3}{4}$; 1
5. 2; 3
6. $\frac{1}{2}$; 5

Reteach

1. 2; 3
2. $-\frac{2}{3}$; 2

Reading Strategies

1. 0
2. 0
3. x-axis
4. (9, 0)
5. y-axis
6. (0, 6)
7. 6
8. 9
9. $-\frac{6}{9}$ or $-\frac{2}{3}$

Success for English Learners

1. They both have a zero as one of their coordinates. The x-intercept has a zero y-coordinate and the y-intercept has a zero x-coordinate.

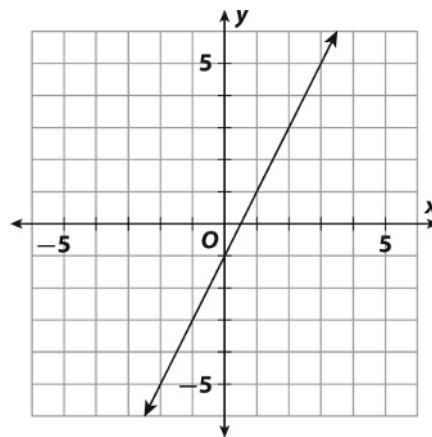
2. $-\frac{3}{4}$

3. The line slopes downward from left to right and crosses the y-axis at $\frac{9}{7}$.

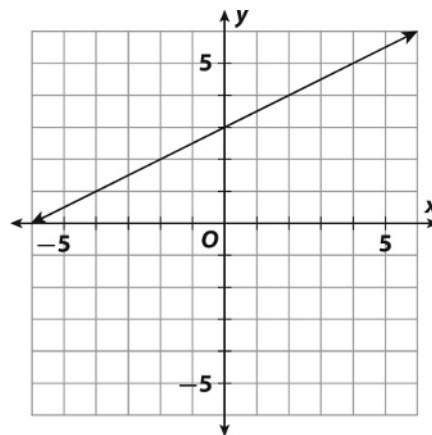
LESSON 4-3

Practice and Problem Solving: A/B

1. 2; -1



2. $\frac{1}{2}$; 3



3. 1, -4

