

Quiz for Lessons 5-1 Through 5-5

5-1 Identifying Linear Functions

Tell whether the given ordered pairs satisfy a linear function. Explain.

1.

x	-2	-1	0	1	2
y	1	0	1	4	9

2. $\{(-3, 8), (-2, 6), (-1, 4), (0, 2), (1, 0)\}$

5-2 Using Intercepts

3. A baby pool that held 120 gallons of water is draining at a rate of 6 gal/min. The function $f(x) = 120 - 6x$ gives the amount of water in the pool after x minutes. Graph the function and find its intercepts. What does each intercept represent?

Use intercepts to graph the line described by each equation.

4. $2x - 4y = 16$

5. $-3y + 6x = -18$

6. $y = -3x + 3$

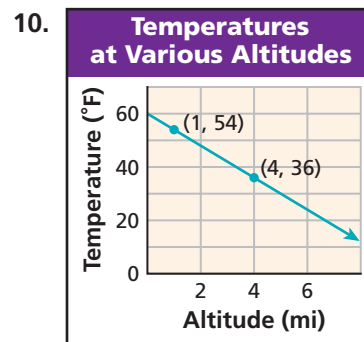
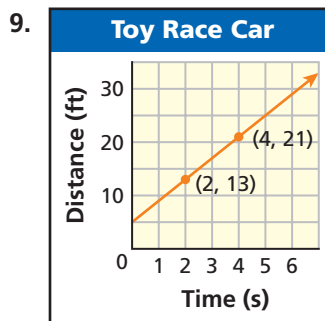
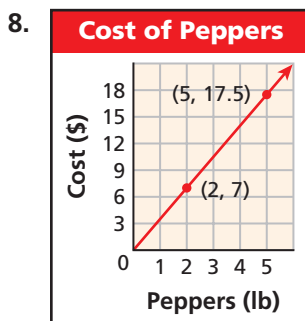
5-3 Rate of Change and Slope

7. The chart gives the amount of water in a rain gauge in inches at various times. Graph this data and show the rates of change.

Time (h)	1	2	3	4	5
Rain (in.)	0.2	0.4	0.7	0.8	1.0

5-4 The Slope Formula

Find the slope of each line. Then tell what the slope represents.



5-5 Direct Variation

Tell whether each relationship is a direct variation. If so, identify the constant of variation.

11.

x	1	4	8	12
y	3	6	10	14

12.

x	-6	-2	0	3
y	-3	-1	0	1.5

13. The value of y varies directly with x , and $y = 10$ when $x = 4$. Find x when $y = 14$.