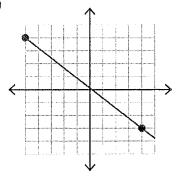
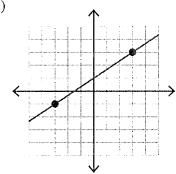
Find the slope of each line.

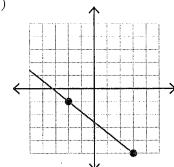
1)



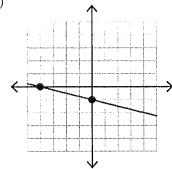
2)



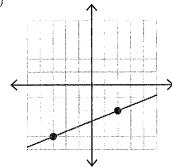
3)



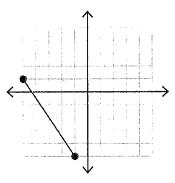
4)



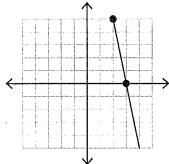
5)



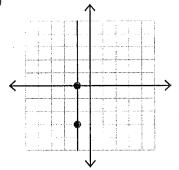
6)



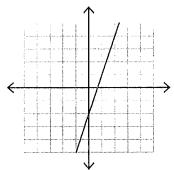
7)



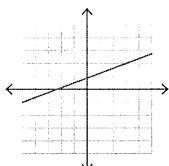
8)



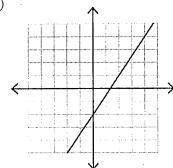




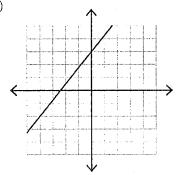
10)



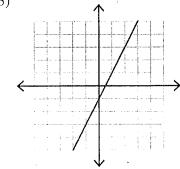
11)



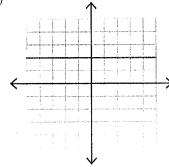
12)



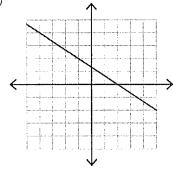
13)



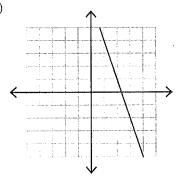
14)



15)



16)

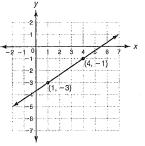


Practice C LESSON

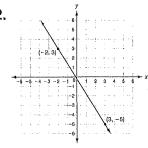
Rate of Change and Slope

Find the slope of each line.

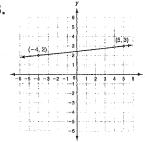
1.



2.

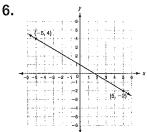


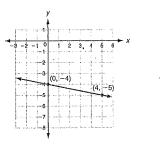
3.

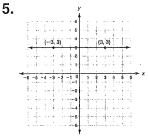


slope =

slope =





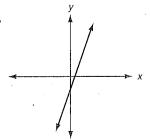


slope = 1

Tell whether the slope of each line is positive, negative, zero, or undefined.

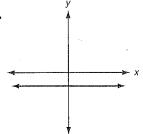
7.

slope = 0

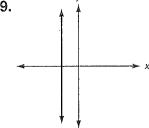


8.

slope =



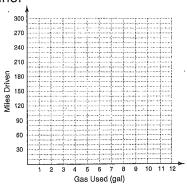
9.



10. The table shows the distance a car drove on one tank of gasoline.

Miles driven	0	60	150	170	230	260
Gas Used (gal)	0	2	5	6	9	11

- a. Graph the data and show the rates of change.
- b. The rate of change represents the gas mileage in miles per gallon. Between which two measurements was the car's gas mileage least?



LESSON

Challenge

Identifying Linear Functions

Linear functions are functions that can be written in the form Ax + By = C where A, B, and C are real numbers and A and B are not both 0.

Follow a path from start to finish in the maze below. Each box you cross through must be a linear function. You may move horizontally or vertically.

Start

3x + 2y = 7	<i>y</i> = 4 <i>x</i>	$y = -\frac{1}{2}x$	$\frac{5}{x} = y + 2$	$x^3 = 27$	<i>xy</i> = 8
x(x+y)=4	$x^2 - 16 = 0$	4x - y = 0	<i>y</i> = 3	$\frac{x}{5} = y + 2$	<i>y</i> = <i>x</i>
$\frac{3}{x} + y = 0$	x (3 + y) = 4	$x + \frac{6}{y} = 3$	y(x+2y)=9	− <i>y</i> = <i>x</i>	$\frac{4}{y} + x = 16$
x +y=5	7x - 5y = 8	$\frac{x}{8} = \frac{y}{3}$	2(x+y)=4	$\frac{y}{4} = 3x$	x(x+2)=5
xy + y = 10	$-y=\frac{2}{5}$	$x^2 - y^2 = 1$	x(4x+y)=3	xy + x = 20	$x^2 + 8 = -20$
<i>xy</i> = 5	x = 3y	8(y+x)=9	2x + 3y = x	$12x = \frac{y}{6}$	y = x ²
$x^2 - 20 = 0$	<i>xy</i> = 10	<i>y</i> = <i>x</i> + 4	x ³ = 10	5x - 4y = 8y	y(3x+y)=4

▼ Finish

Practice A

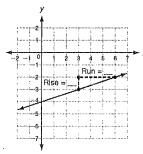
Rate of Change and Slope

Fill in the blanks to define slope.

- **1.** The _____ is the difference in the *y*-values of two points on a line.
- **2.** The _____ is the difference in the *x*-values of two points on a line.
- 3. The slope of a line is the ratio of ______ to ____ for any two points on the line.

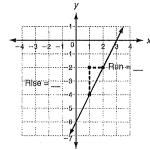
Find the rise and run between each set of points. Then, write the slope of the line.

4.



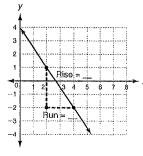
slope =





slope =

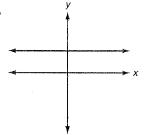




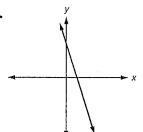
slope =

Tell whether the slope of each line is positive, negative, zero, or undefined.

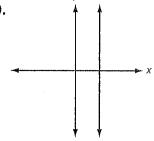
7.



8.



9.



10. The table shows a truck driver's distance from home during one day's deliveries. Find the rate of change for each time interval.

Time (h)	0	1	4	5	8	10
Distance (mi)	0	35	71	82	199	200

Hour 0 to Hour 1: _____ Hour 1 to Hour 4: ____ Hour 4 to Hour 5: ____

Hour 5 to Hour 8: _____ Hour 8 to Hour 10: _____

The rate of change represents the average speed. During which time interval was the driver's average speed the least?_____