Name _____

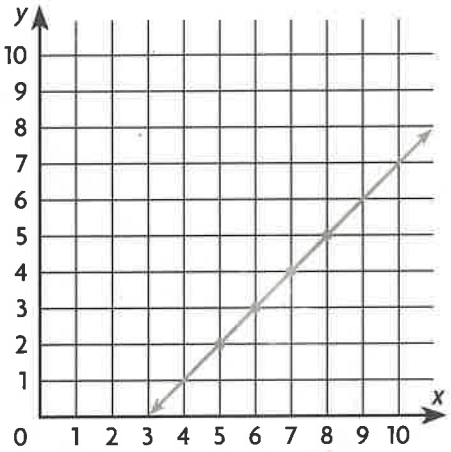
Equations and Graphs

Common Core **COMMON CORE STANDARD—6.EE.C.9**
Represent and analyze quantitative relationships between dependent and independent variables.

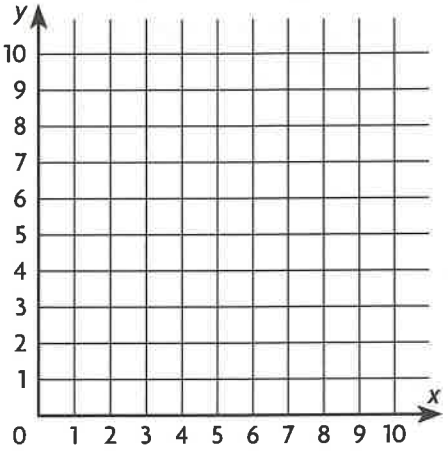
Graph the linear equation.

1. $y = x - 3$

x	y
5	2
6	3
7	4
8	5

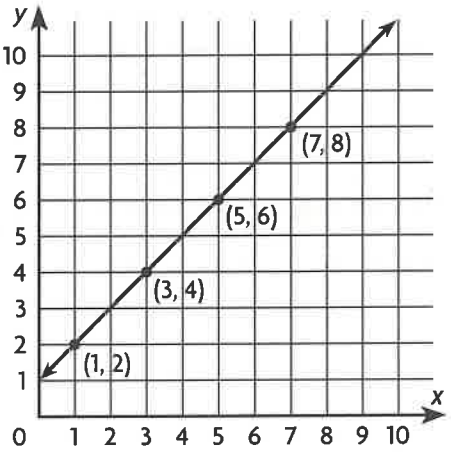


2. $y = x \div 3$

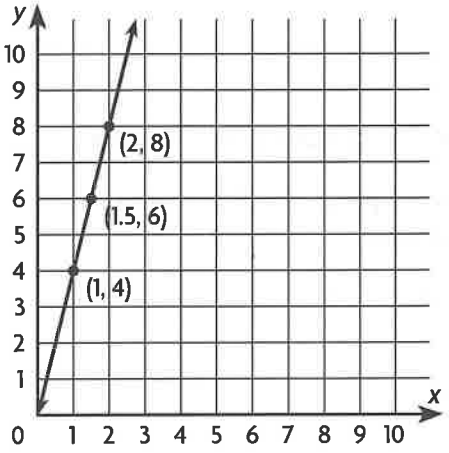


Write a linear equation for the relationship shown by the graph.

3.



4.



_____ _____

Problem Solving Real World

5. Dee is driving at an average speed of 50 miles per hour. Write a linear equation for the relationship that gives the distance y in miles that Dee drives in x hours.

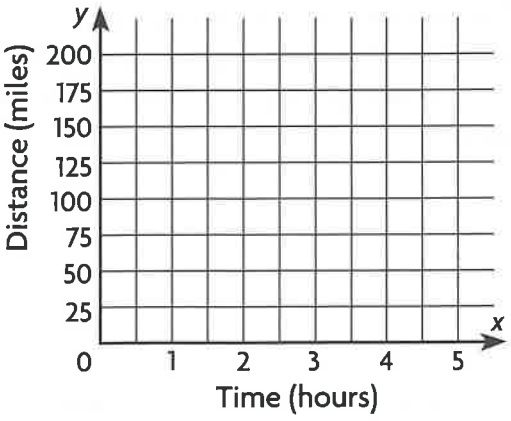
_____

6. Graph the relationship from Exercise 5.

7. WRITE Math Explain how to write a linear equation for a line on a graph.

_____

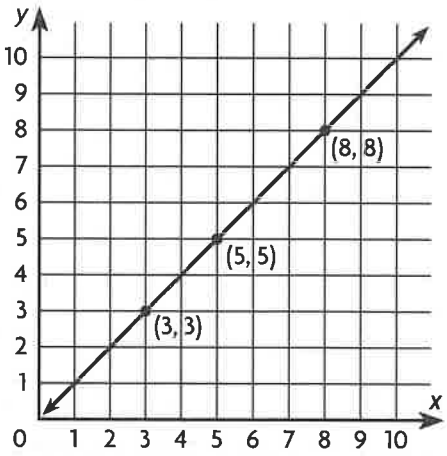
Dee's Distance



Lesson Check (6.EE.C.9)

1. A balloon rises at a rate of 10 feet per second. What is the linear equation for the relationship that gives the height y in feet of the balloon after x seconds?

2. Write the linear equation that is shown by the graph.



Spiral Review (6.EE.A.4, 6.EE.B.5, 6.EE.C.9)

3. Of the three expressions shown, which two are equivalent?

$3 + 2(9 + 2n)$ $\quad 7(3 + 4n)$ $\quad 21 + 4n$

4. Which of the following are solutions of $j \geq 0.6$?

$j = 1, j = {}^{-}0.6, j = \frac{3}{5}, j = 0.12, j = 0.08$

5. Red grapes cost \$2.49 per pound. Write an equation that shows the relationship between the cost c in dollars and the number of pounds of grapes p.

6. It costs \$8 per hour to rent a bike. Niko graphs this relationship using x for number of hours and y for total cost in dollars. Write an ordered pair that is a point on the graph of the relationship.