

Name: _____

Class: _____ Date: _____

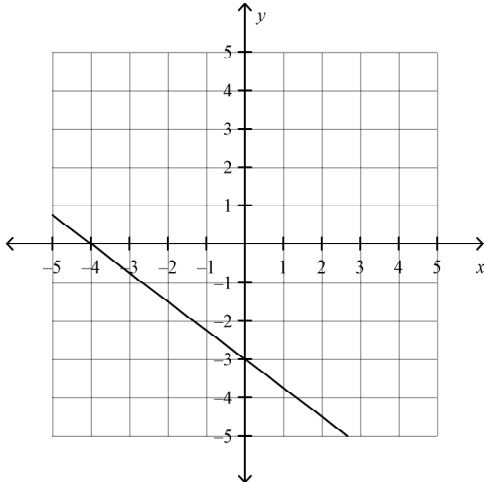
PostAssessment Linear Unit

Multiple Choice

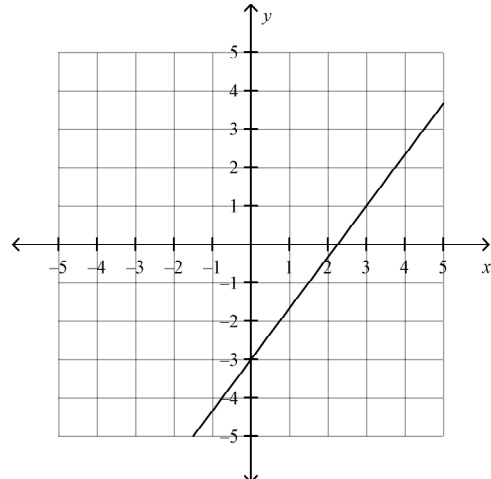
Identify the choice that best completes the statement or answers the question.

_____ 1 Use the slope and y-intercept to graph the equation $y = \frac{3}{4}x - 3$.

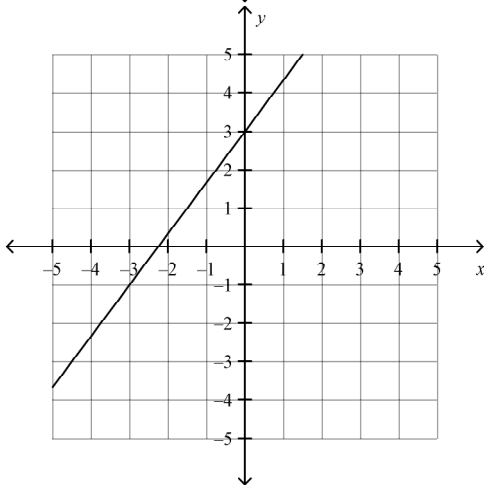
A



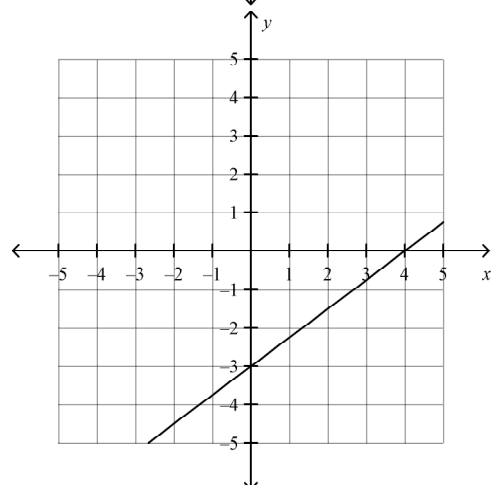
C



B



D



2 Given a line that passes through (1, -5) and (-3, 7).

A. Write an equation for the line in point-slope form.

B. Rewrite the equation in slope-intercept form.

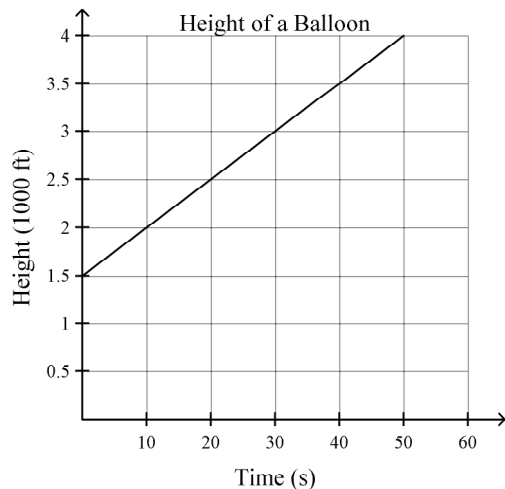
A $y - 5 = 3(x + 1)$; $y = 3x + 8$

C $y - 5 = \frac{1}{3}(x + 1)$; $y = \frac{1}{3}x + \frac{16}{3}$

B $y - 1 = \frac{1}{3}(x + 5)$; $y = \frac{1}{3}x + \frac{8}{3}$

D $y + 5 = -3(x - 1)$; $y = -3x - 2$

3 The rate of change is constant in the graph. Find the rate of change. Explain what the rate of change means for the situation.



A 30; the balloon rises 30 ft every second.

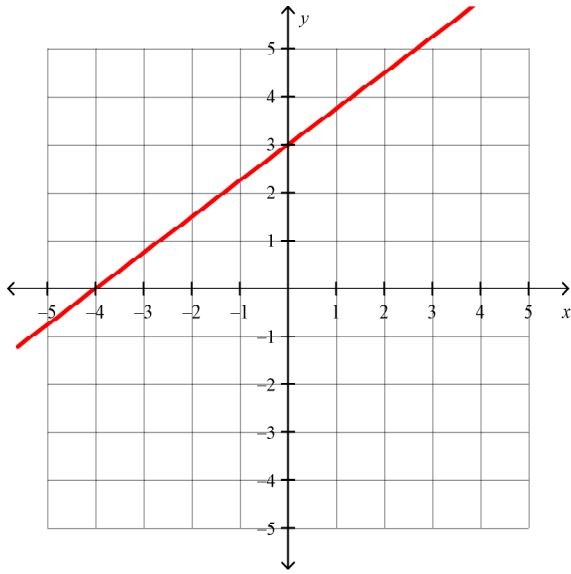
B 50; the balloon rises 50 ft every second.

C 1500; every 1500 seconds the balloon rises 1 ft.

D 30; every 30 seconds the balloon rises 1.5 ft.

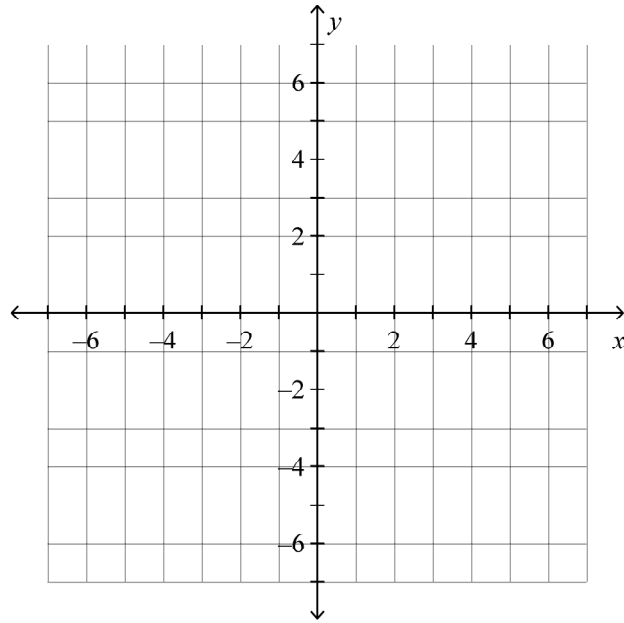
Short Answer

4 Find the zero of this graph.



5 Model the function rule $y = 3x + 0$ with a table of values and a graph.

x	y
-1	
0	
1	



6 An employee receives a weekly salary of \$340 and a 6% commission on all sales.

A. Write a rule to describe the function $f(d)$ that gives weekly earnings in terms of d dollars in sales.

B. Find the employee's earnings for a week with \$660 total sales.

C. What were the employee's total sales for a week in which her earnings were \$1300?

- 7 Without graphing, decide whether the system has *one solution*, *no solution*, or *infinitely many solutions*. Explain your answer.

$$y = -3x + 4$$

$$y = 3x + 8$$

- 8 Write the inequality y is less than x plus 4. Explain how to graph the inequality. Then graph the inequality.

- 9 Why is it NOT possible to write the equation of the line through $(-8, -5)$ and $(-8, -9)$ in slope-intercept form? Write an equation for this line and graph the line.