

Horizontal & Vertical Lines: Classwork

1. Graph each of the following linear equations. Use a straight edge and put arrows on the ends to show that the lines extend in both directions forever.

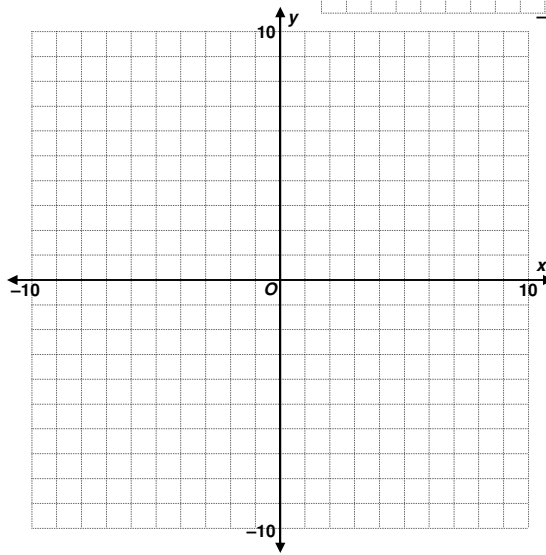
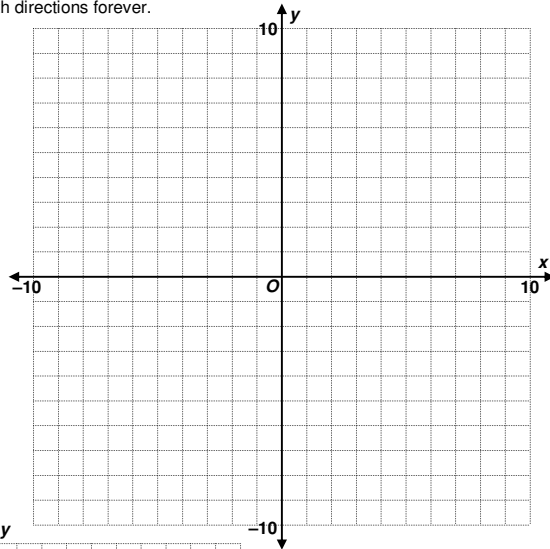
A. $y = \frac{3}{4}x - 5$

B. $y = 5$

C. $y = 7 - 2x$

D. $x = -7$

E. $y = x + 2$



F. $y = 3x + 1$

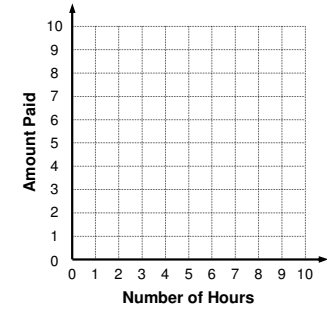
G. $y = -8$

H. $y = -\frac{1}{3}x - 4$

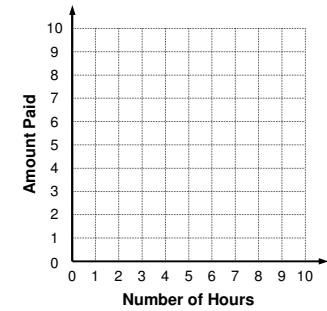
I. $y = 6 - x$

J. $x = 7$

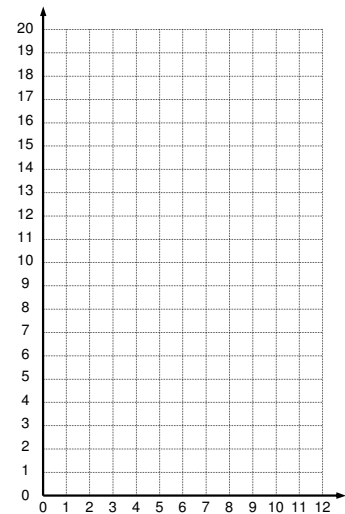
2. Use the equation to answer the following: $y = 5$
- Complete the graph that matches the equation. Title the graph.
 - Write a story problem to match the equation.



3. Use the equation to answer the following: $x = 9$
- Complete the graph that matches the equation. Title the graph.
 - Write a story problem to match the equation.



4. Use the equation to answer the following: $y = 13 - \frac{4}{3}x$
- Complete the graph that matches the equation. Title the graph.
 - Write a story problem to match the equation.



- c. Now use the equation to complete this table:
Show your work.

x	y
90	
27	
-3	
-15	

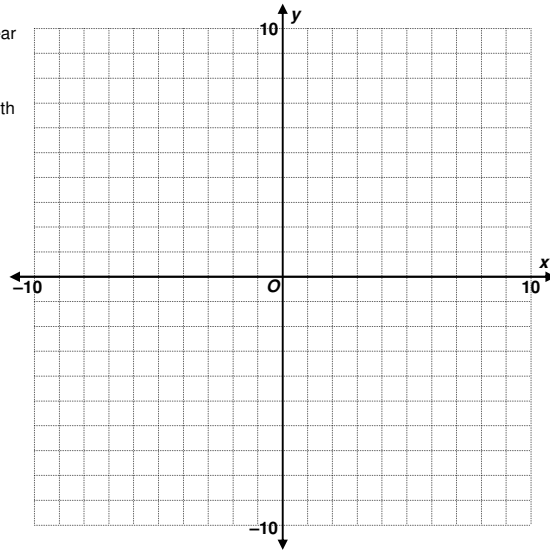
Horizontal & Vertical Lines: Homework

5. Graph each of the following linear equations. Use a straight edge and put arrows on the ends to show that the lines extend in both directions forever.

a. $y = \frac{2}{5}x - 4$

b. $y = 4x + 1$

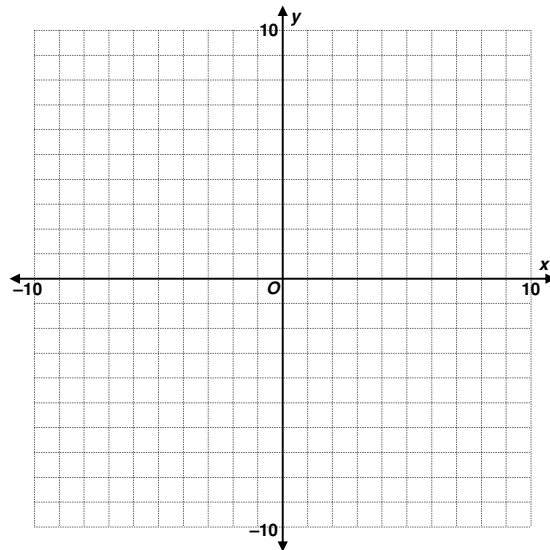
c. $y = -6$



d. $y = 5 - \frac{1}{4}x$

e. $y = 8 - 2x$

f. $x = 5$



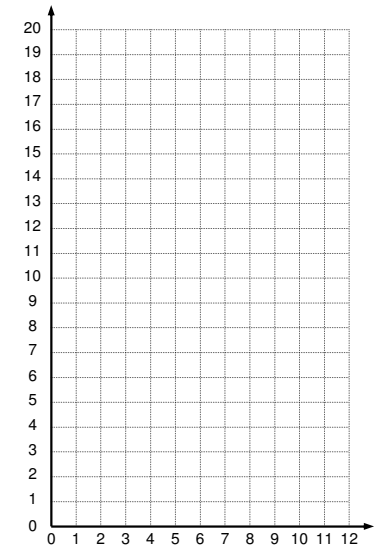
6. Cody is only 8 inches tall, but everyday he grows $\frac{3}{4}$ of an inch.

- a. Write an equation to show his height h after any number of days d .

- b. Complete the graph that matches the equation. Label each axis and title the graph.

- c. Complete the table that matches the equation.

0	
4	
16	
28	
60	



- d. What does the slope represent in the context of the story?

- e. What does the y -intercept represent in the context of the story?