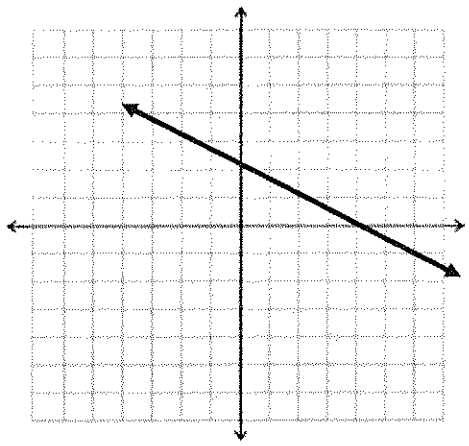
Progress Assessment

Circle the letter of the best answer.

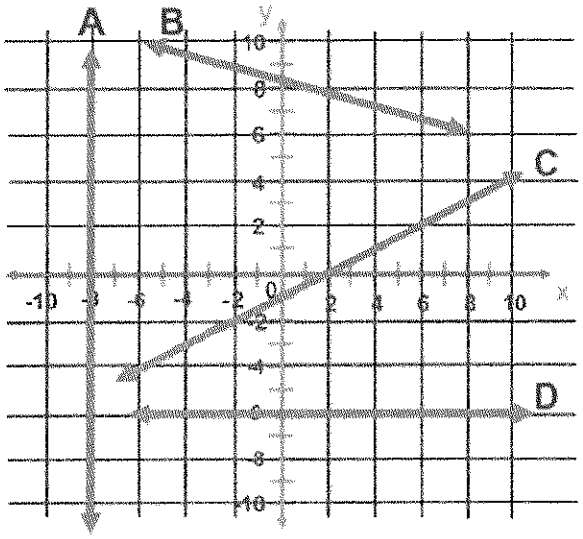
1. The cost of having your car towed is \$45 to hook up the car and then \$3.50 per mile towed. Which equation models this scenario?
   a. $y = 40x + 3.50$
   b. $y = 3.50x + 45$
   c. $y = 48.50x$
   d. $x + y = 48.50$

2. A store is giving away 150 gift cards each valued at \$20 for every hour that the store is open. What equation models this scenario?
   a. $y = -20x + 3000$
   b. $y = -x + 150$
   c. either a or b
   d. neither a nor b

3. What is the equation of this line in slope-intercept form?
   a. $y = -\frac{1}{2}x + 2$
   b. $y = -\frac{1}{2}x + 1$
   c. $y = \frac{1}{2}x + 2$
   d. $y = \frac{1}{2}x + 1$



4. Which line above has a slope of zero?
   a. Line A
   b. Line B
   c. Line C
   d. Line D

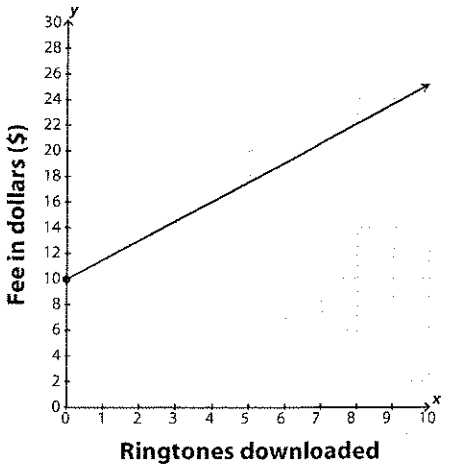


5. Which line above has an undefined slope?
   a. Line A
   b. Line B
   c. Line C
   d. Line D

6. Which line has a positive slope?
   a. Line A
   b. Line B
   c. Line C
   d. Line D

7. A ringtone company charges $10 a month for the service plus $1.50 for each ringtone downloaded. What is the graph of the equation that models the total fees?

a.



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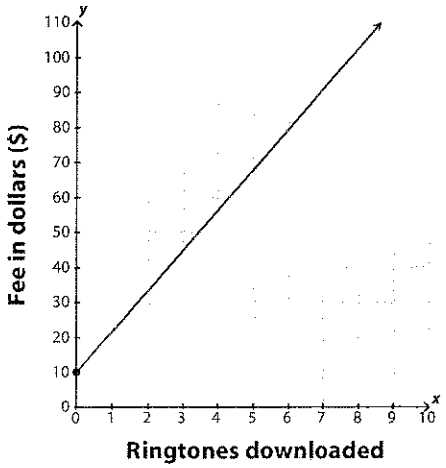

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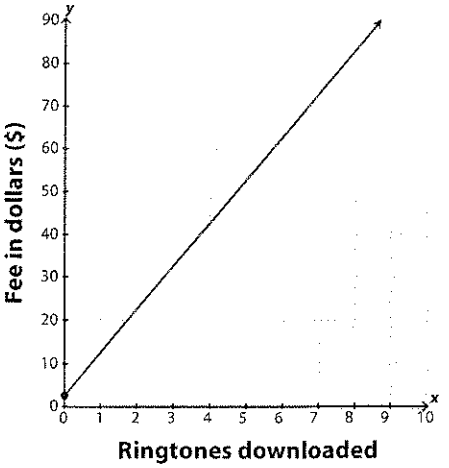

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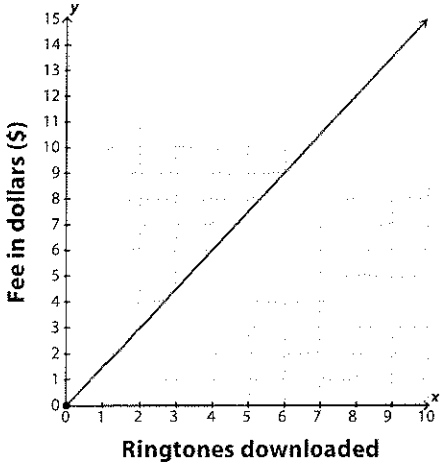
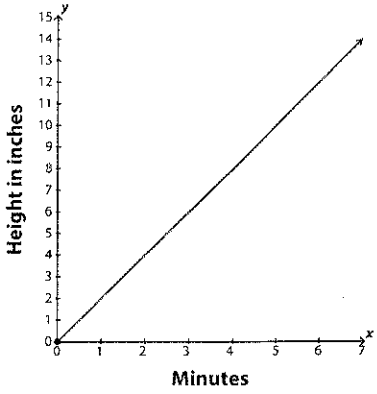
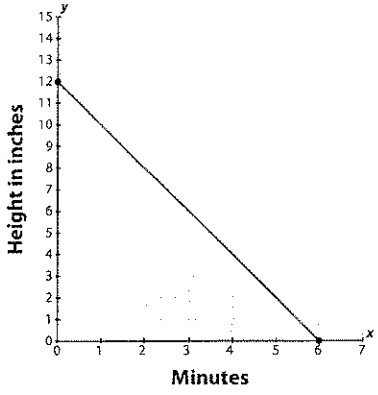


8. A 12-inch candle burns at a rate of 2 inches per hour. What is the graph of the equation that models the height of the candle over time?

a.



c.



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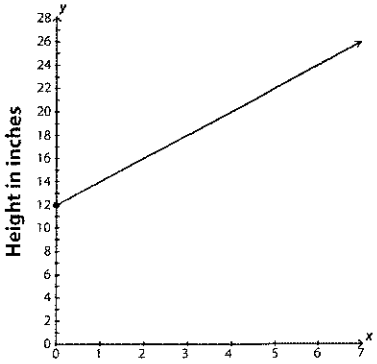
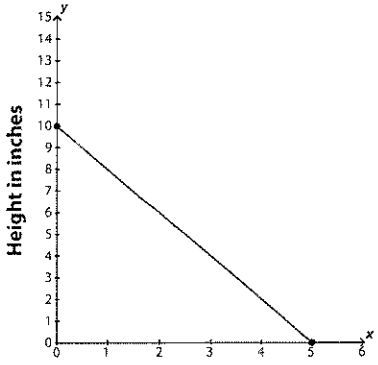


d.

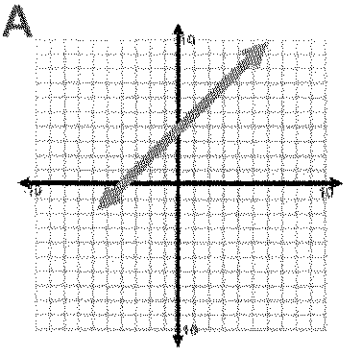


9. What is the equation of the line in point-slope form containing the points (4, -1) and (10, 0)?

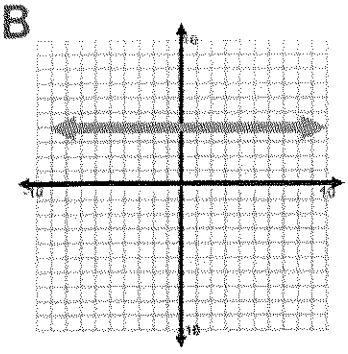
a. $y - 1 = 1/6(x - 4)$
b. $y = 1/6(x - 10)$
c. $y = 1/6x - 5/3$
d. $y + 0 = -1/6(x + 10)$

10. Which graph shows the equation $y = x + 4$?

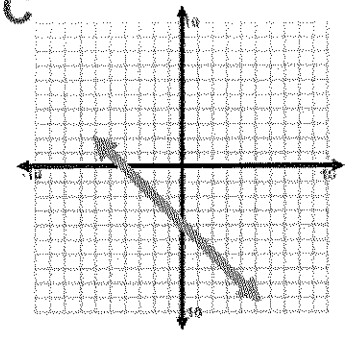
A



B



C



11. The line y = -7 is:
    a. Horizontal
    b. Vertical
    c. Neither
    d. Cannot be determined

12. The line x = 5 is:
    a. Horizontal
    b. Vertical
    c. Neither
    d. Cannot be determined

13. Which equation is written in slope-intercept form?
    a. $y - 4 = 3(x - 5)$
    b. $y - 4 = 3x - 5$
    c. $3x - y = -11$
    d. $y = 3x - 11$

14. Which equation is written in point-slope form?
    a. $y - 2 = 9(x + 2)$
    b. $y - 2 = 9x + 2$
    c. $9x - y = -20$
    d. $y = 9x - 20$

Constructed Response. Show all work.

15. You start a lawn mowing service. You pay $75 for the lawn mower and plan on charging $25 per lawn. Write an equation to relate your income *y* to the number of lawns you mow *x*.

16. A line has an x-intercept of 4 and y-intercept of 7.
    a. What is the slope of this line?
    b. Write an equation in slope intercept form for the line.
    c. Write an equation in point-slope form.