Algebra
Worksheet 2

Choice *E*, in multiple-choice questions, is always: *I request help from the teacher*.

You may mark E in addition to one other choice if you think that you have the right answer to the question but you do not feel that you have a complete understanding of the problem.

Your teacher will decide whether to use the two-point or four-point scoring rubric for problems that use numbers, pictures, or words to justify/explain your answer(s). You may request help for these questions, too. Write the word "teacher" by your answer(s).

1. After Carter gave his ten closest friends the same amount of money, he still had $6.00 left. Which equation represents this problem if he originally had $36.00, where *m* is the amount of money given to each friend?

   A. $10m - 6 = 36$ B. $10m + 6 = 36$ C. $6m + 10 = 36$ D. $6m - 10 = 36$ E. Teacher

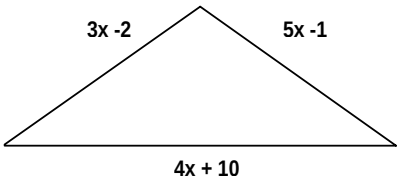
2. How much did Carter give his closest friends? (See Exercise #1)

   A. $20 B. $5 C. $12 D. $3 E. Teacher

3. Solve for x: $4x - 12 = 68$

   A. $x = 20$ B. $x = 19$ C. $x = 16$ D. $x = 10$ E. Teacher

4. Equations for each side of a triangle given at the right.
   Which expression represents the perimeter of the triangle?

   A. $12x + 13$
   B. $12x + 7$
   C. $4x + 11$
   D. $12x - 1$
   E. Teacher

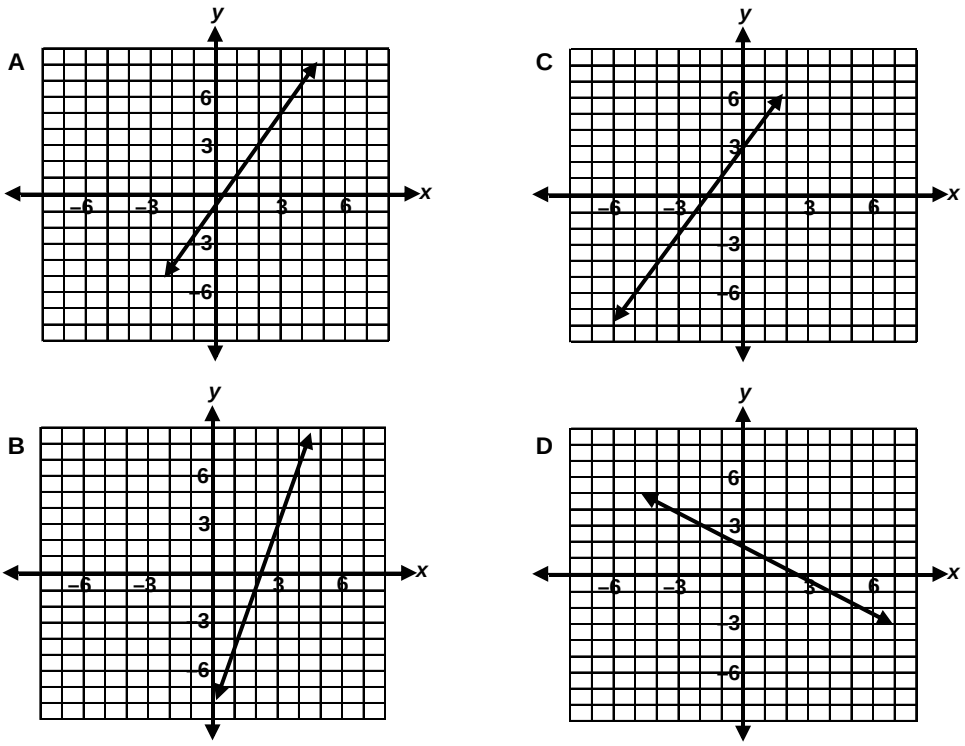
5. What is the value of *x* in exercise #4, if the perimeter is 31?

   A. 1 B. 3 C. 2 D. 4 E. Teacher

6. Vivian owns and operates Vivian's Vital Videos store. When Vivian figures out the price for a video, she adds the amount she pays her wholesale distributor for the video (***c***), and how much she needs to have per video to pay her staff, rent, utility bills and other overhead ($0.70 a video). Then she triples the result and sets that as the final price of one video (***p***). Which rule describes Vivian's calculations?

   A. $p = 3c + 3$ B. $p = 3(c + 0.7)$ C. $p = (.70 + 3)c$ D. $p = 3c + .70$ E. Teacher

7. Which graph represents y = 2x – 1?



8. Carter bought three pounds of deli-sliced roast beef and two pounds of salami. Each pound of roast beef costs $3.29. Carter spent a total of $17. There was no tax on the luncheon meats. Let *s* represent the cost of one pound of salami. Which equation is one way to represent this situation?

   A. $2s + 3(3.29) = 17$
   B. $2s + 3s = 17$
   C. $2s + 3s = 17s$
   D. $3s + 2(3.29) = 17$
   E. Teacher

9. Which expression is equivalent to $12a + 6b$

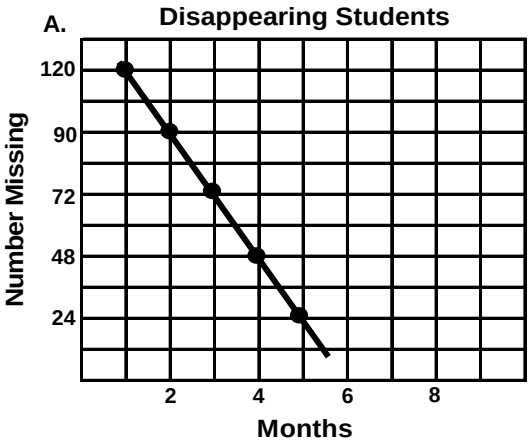
   A. $18ab$ B. $6^2(a + b)$ C. $6(2a + b)$ D. $6a + 12b$ E. Teacher

10. The relationship between x and y is $y = -3x + 4$. How does the value of y change when x increases from 0 to 4?

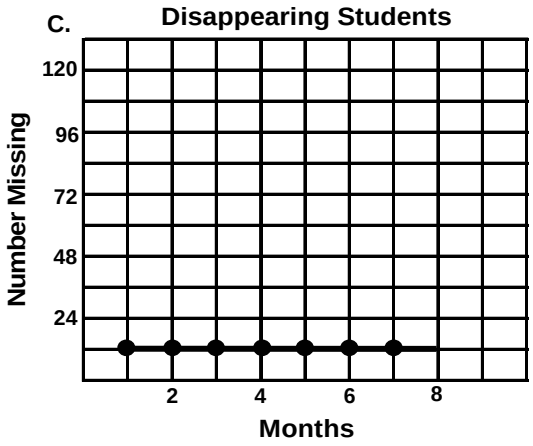
    A. y decreases by 4
    B. y decreases by 12
    C. y increases by 4
    D. y increases by 12
    E. Teacher

11. Carter thought that the Etna High students disappeared at a steady rate of 12 per month. Which chart shows how many disappeared for any number of months?

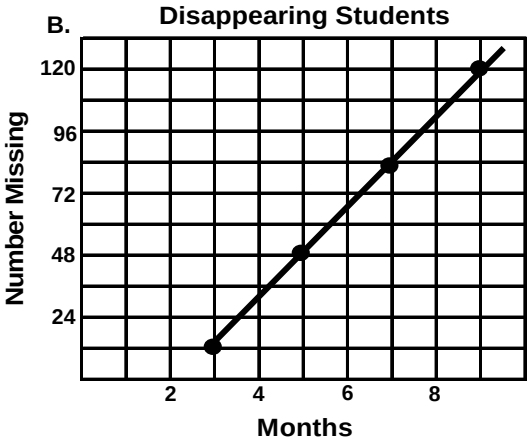
A.



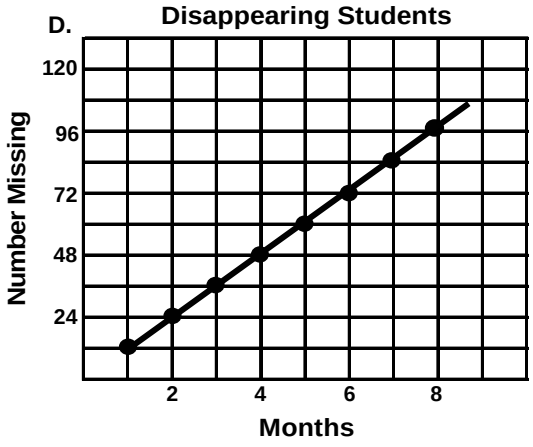
C.



B.



D.



E. Teacher