

Write an equation for the line that satisfies the given conditions.

1. The slope is 7 and the y-intercept is -2.
2. The slope is 0 and the y-intercept is 9.18.
3. The line passes through the points (3, 1) and (6, 4).
4. The line passes through the points (-24, -11) and (-8, -3).
5. The line passes through the points (-4.5, 2) and (-12.3, 2).
6. The slope is  $-\frac{1}{2}$  and the line passes through the point (5, 0).

At Big Bob's Bowling Center, the cost to bowl four games (not including the shoe rental) is \$8.40, and the cost to rent shoes is \$1.15.

7. Write an equation for the cost,  $C$ , for renting shoes and bowling  $n$  games.
8. What is the y-intercept for your equation, and what does it represent?
9. What is the slope of your equation and what does it represent?
10. What is the cost of renting shoes and bowling 6 games?
11. Tony paid \$7.45 for his games and shoe rental. How many games did Tony bowl?

Today is Barry's birthday. Barry's grandfather gave him some money as a birthday gift. Barry says he will put his birthday money in a safe place and add part of his allowance to it each week. His sister Betty asks him how much his grandfather gave him and how much of his allowance he is planning to save each week. Barry does not answer his sister directly. Instead, he gave her some information and let her puzzle out the answer for herself.

12. Barry tells Betty that he will save the same amount from his allowance each week. He says that after five weeks, he will have saved a total of \$175 and after eight weeks, he will have saved \$190. How much money is Barry planning to save each week?
  
  
  
  
  
  
  
  
  
  
13. How much money did Barry's grandfather give him for his birthday?
  
  
  
  
  
  
  
  
  
  
14. Write an equation for the total amount of money,  $m$ , Barry will have saved after a given number of weeks,  $n$ .