

1. Each week Quentin saves \$30.
  - a. Create a table that shows the total amount of money Quentin has saved ( $s$ ) from week ( $w$ ) 1 through week 8.
  - b. Write an equation that represents the relationship (function) between the number of weeks that Quentin has saved his money,  $w$ , and the total amount of money in dollars the has saved,  $s$ .
  - c. Name the independent and dependent variables.
  - d. Use the table to make a graph.
2. Zoe is collecting books to donate. She started with 3 books and collects two more each week. She is using the equation,  $b = 2w + 3$ , where  $b$  is the total number of books collected and  $w$  is the number of weeks she has been collecting books.
  - a. Create a table that shows the books Zoe has collected ( $b$ ) for weeks ( $w$ ) 1 through 6.
  - b. Name the independent and dependent variables.
  - c. Create a graph to represent how many books Zoe has collected when  $w$  is 5 or less.
3. Eliana plans to visit the fair. She must pay \$5 to enter the fairgrounds and an additional \$3 per ride.
  - a. Create a table to show the total cost ( $t$ ) of her day at the fair if she goes on 3, 5, 7, and 9 rides.
  - b. Write an equation to show the relationship between  $r$ , the number of rides, and  $t$ , the total cost in dollars.
  - c. State which variable is dependent and which is independent.
  - d. Create a graph that models the equation.
4. Caleb started saving money in a cookie jar. He started with \$25. He adds \$10 to the cookie jar each week.
  - a. Create a table that shows how much money ( $t$ ) Caleb has saved for weeks ( $w$ ) 0 through 6.
  - b. Write an equation where  $w$  is the number of weeks Caleb saves his money and  $t$  is the total amount in dollars in the cookie jar.
  - c. Determine which variable is the independent variable and which the dependent variable is.
  - d. Graph the total amount in the cookie jar for  $w$  being less than 6 weeks.

5. Kevin is taking a taxi from the airport to his home. There is a \$6 flat fee for riding in the taxi. In addition, Kevin must also pay \$1 per mile.
  - a. Create a table that shows the total cost ( $t$ ) for traveling 10, 15, 20, 25, and 30 miles ( $m$ ).
  - b. Write an equation where  $m$  is the number of miles and  $t$  is the total cost in dollars of the taxi ride.
  - c. Determine which variable is independent and which is dependent.
  - d. Graph the total cost for  $m$  for traveling 10, 15, 20, 25, and 30 miles.
  
6. Anna started with \$10. She saved an additional \$5 each week.
  - a. Create a table that shows the total cost ( $t$ ) Anna has saved for the first 8 weeks ( $w$ ).
  - b. Write an equation that can be used to determine the total amount saved in dollars,  $t$ , after a given number of weeks,  $w$ .
  - c. Determine which variable is independent and which is dependent.
  - d. Graph the total amount saved for the first 8 weeks.
  
7. Aliyah is purchasing produce at the farmers' market. She plans to buy \$10 worth of apples. The apples cost \$1.50 per pound.
  - a. Create a table that shows the cost ( $t$ ) of 1, 2, 3, 4, 5, 6, 7, and 8 pounds of apples ( $a$ ).
  - b. Write an equation to show the total cost of the produce, where  $T$  is the total cost, in dollars, and  $a$  is the number of pounds of apples.
  - c. Determine which variable is dependent and which is independent.
  - d. Graph the equation on the coordinate plane.