

**Problem Set**

1. Caleb started saving money in a cookie jar. He started with \$25. He adds \$10 to the cookie jar each week. 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. Determine which variable is the independent variable and which is the dependent variable. Then, graph the total amount in the cookie jar for  $w$  being less than 6 weeks.



2. 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. Write an equation where  $m$  is the number of miles and  $t$  is the total cost in dollars of the taxi ride. Determine which variable is independent and which is dependent. Then, graph the total cost for  $m$  being less than 6 miles.



3. Anna started with \$10. She saved an additional \$5 each week. Write an equation that can be used to determine the total amount saved in dollars saved,  $t$ , after a given number of weeks,  $w$ . Determine which variable is independent and which is dependent. Then, graph the total amount saved for the first 8 weeks.



4. Aliyah is purchasing produce at the farmers' market. She plans to buy \$10 worth of potatoes and some apples. The apples cost \$1.50 per pound. 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. Determine which variable is dependent and independent. Then, graph the equation.

