

Real-World Problem Solving

For use with pages 412–417

Lemonade Stand

Cara is running a lemonade stand during the summer. Each day, she spends about \$6 on supplies and sells the lemonade for \$.25 per cup. The equation $y = 0.25x - 6$ models the amount of money y Cara makes for each cup x of lemonade she sells.

In Exercises 1–5, use the information above.

1. Find the x - and y -intercepts of the equation. Then determine what the intercepts tell you about the number of cups of lemonade sold and the amount of money Cara makes.
2. What is the slope of the equation? What does it tell you about the amount of money Cara makes?
3. Graph the equation, making sure that you can see both intercepts on the graph.
4. How much money does Cara make selling 20 cups of lemonade? 30 cups of lemonade? 40 cups of lemonade?
5. How many cups of lemonade does Cara have to sell in order to make \$1? \$10? \$100?