**Going to the State Fair Task**

You are going to Kentucky State Fair in August. You are trying to figure out how much you should plan to spend. The graph below shows how much three different people spent after going through the main gate and then buying their ride tickets. Every ride ticket is the same price.

Money Spent at the Kentucky State Fair

Amount spent at the fair / Number of tickets purchased
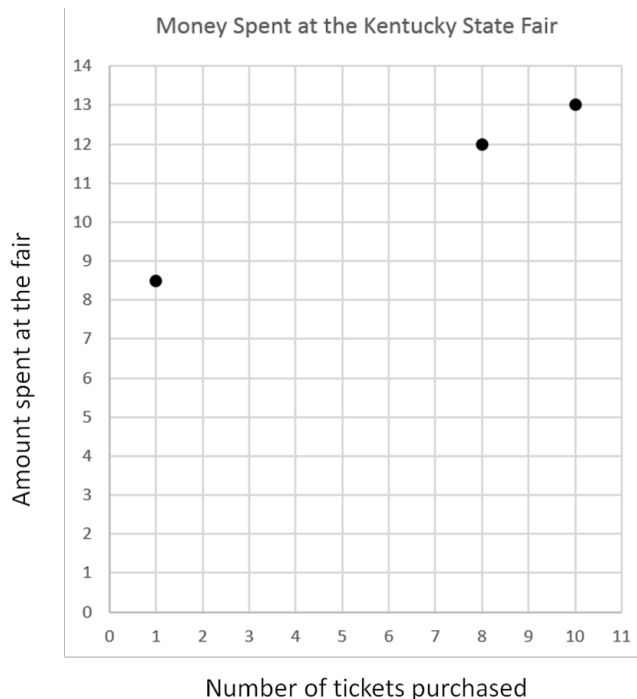
1. After entering the fair, you decide to buy 4 ride tickets. What will be your total cost for attending the fair? How do you know?

2. Describe how the cost increases as you buy more tickets. Be specific.

3. After entering the fair, you decide you want to go on a lot of rides. What will be the total cost for attending the fair and then purchasing 15 ride tickets?

4. Write a description, in words or numbers and symbols that can be used to find the total cost after entering the fair and purchasing any number of tickets.

5. How does the ticket price appear in your description or expression?

6. How does the ticket price appear in the graph?

Learning Goals

As a result of engaging in the lesson Mrs. Mossotti wanted her students to understand that:

1. The rate of change can be seen as the ratio of the change in the y-variable compared to the change in the x-variable, as the rate expressed with the words 'for each, per, for every' in a verbal description, or as the coefficient of x in the equation $y=mx + b$.

2. Some functions do not "start" at zero. That is, the point (0,0) is not a solution for all linear functions.

3. The y-intercept can be understood as the initial value of a linear function in a real-world context.