

Business Finance: Graphing Profits

Putting your companies finances onto a graph can help you see the big picture.



Lesson Objective

Students will learn how to make a graph to show their company's profits.



Words to know

Data: A collection of numbers or values.

Chart/Table: Numbers or value arranged in rows and columns.

Graph: A picture representing a series of values and the relationship between them.

Slope: The direction and steepness of the line on a graph that represents the data being graphed.

Axis: The lines that form the bottom and side of a graph.



Charting Data

Now that you have a table showing the potential profits for your candy bar sales, you will graph the data.

Candy Sold	Profits at \$1.00	Profits at \$1.50
1	\$1.00	\$1.50
2	\$2.00	\$3.00
3	\$3.00	\$4.50
4	\$4.00	\$6.00
5	\$5.00	\$7.50
6	\$6.00	\$9.00
7	\$7.00	\$10.50
8	\$8.00	\$12.00
9	\$9.00	\$13.50
10	\$10.00	\$15.00

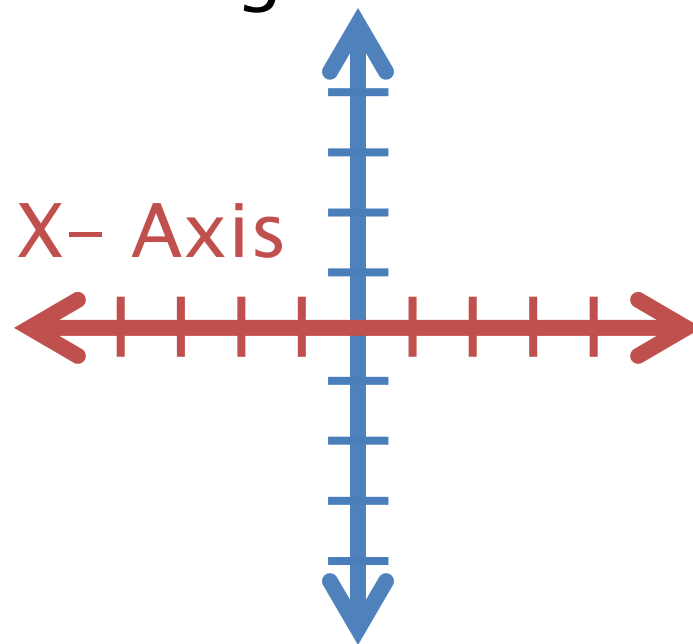


Charting Data

Step 1: Identify what the X- Axis will show.

We are going to list the number of candy bars sold along the X-Axis.

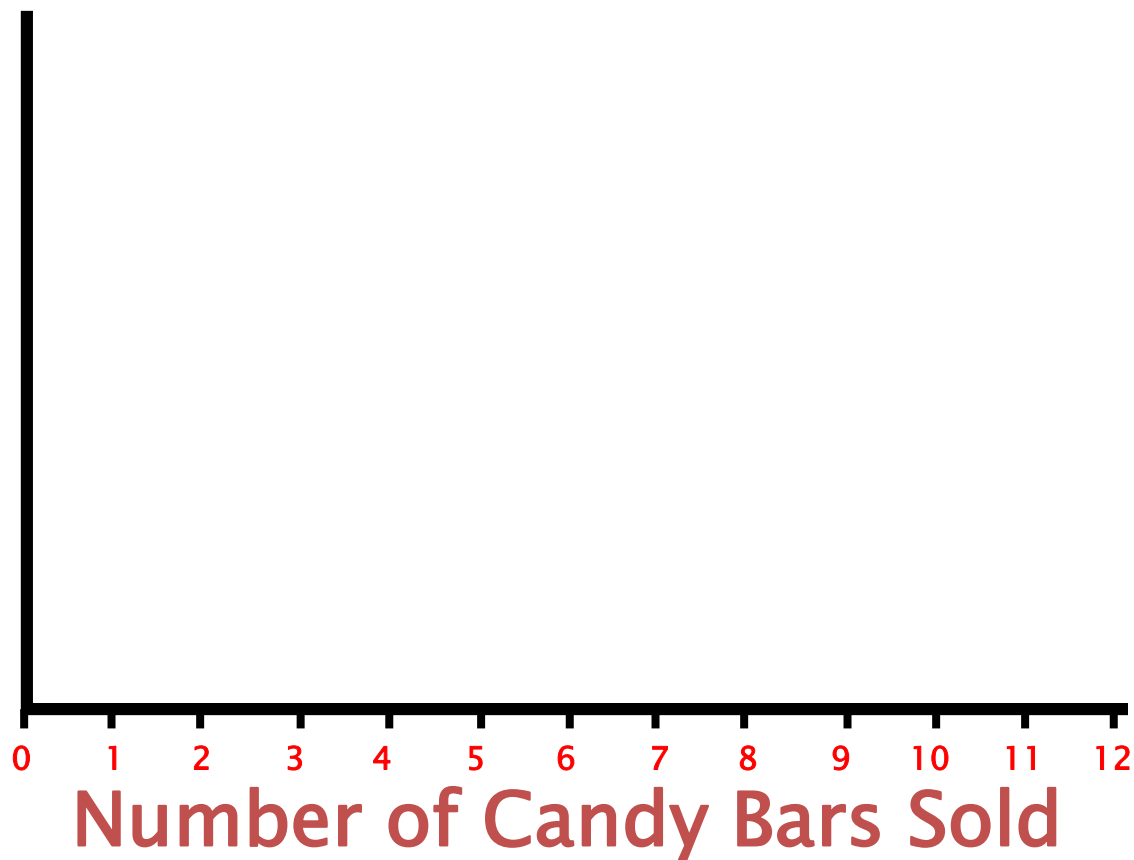
Candy Sold	Profits at \$1.00	Profits at \$1.50
1	\$1.00	\$1.50
2	\$2.00	\$3.00
3	\$3.00	\$4.50
4	\$4.00	\$6.00
5	\$5.00	\$7.50
6	\$6.00	\$9.00
7	\$7.00	\$10.50
8	\$8.00	\$12.00
9	\$9.00	\$13.50
10	\$10.00	\$15.00





Charting Data

Step 1: Identify what the **X- Axis** will show.



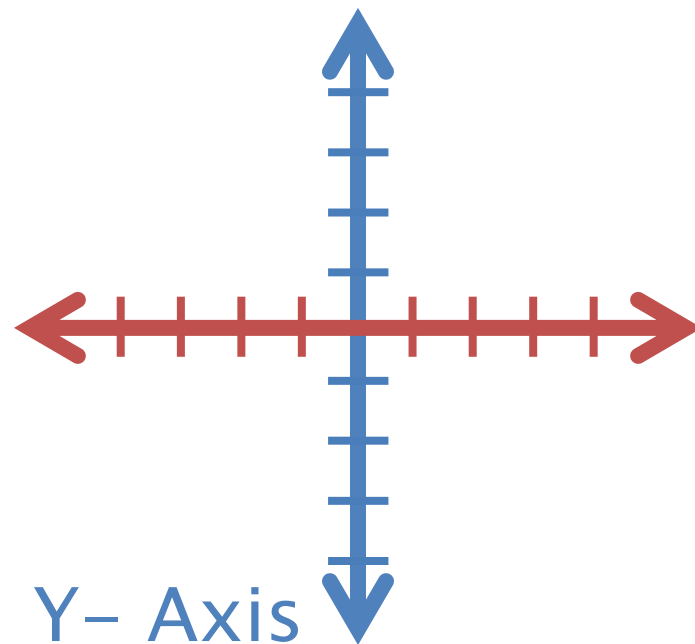


Charting Data

Step 2: Identify what the Y- Axis will show.

We are going to list the projected profits along the Y-Axis.

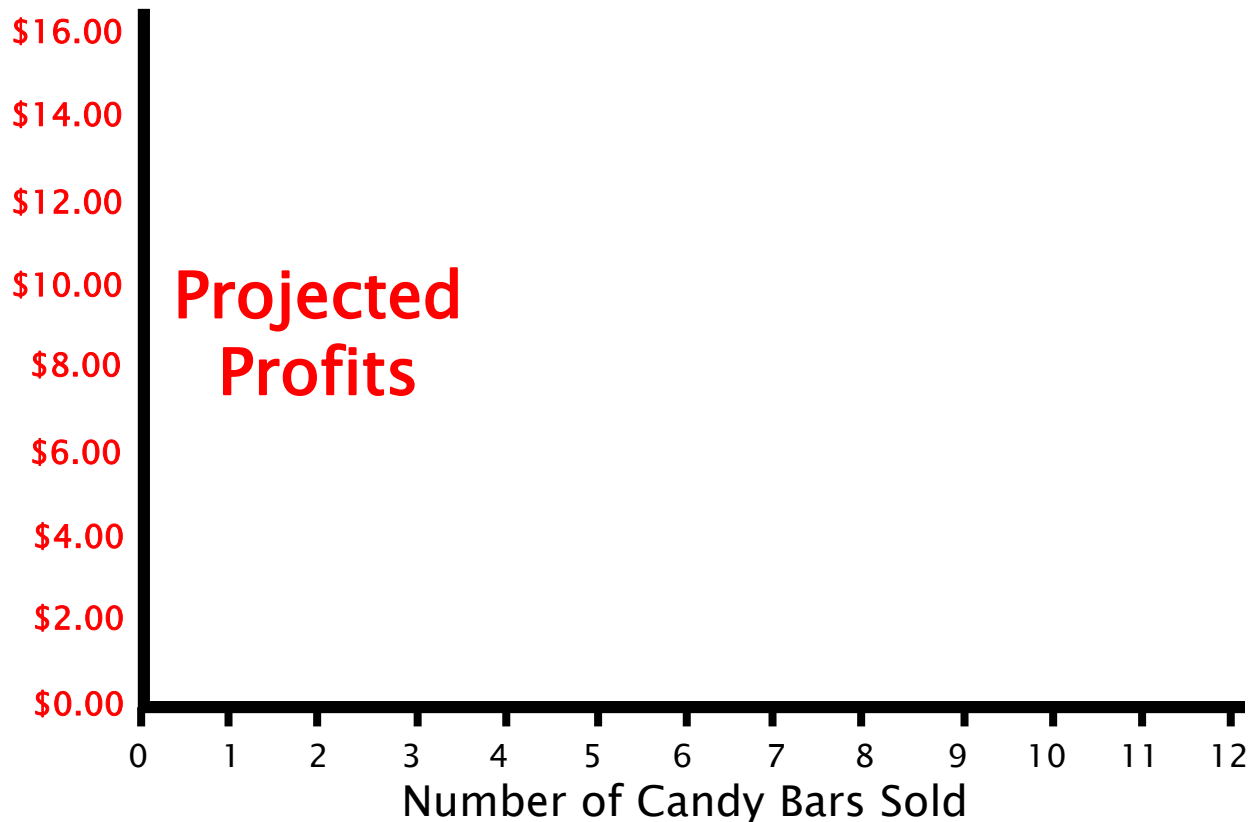
Candy Sold	Profits at \$1.00	Profits at \$1.50
1	\$1.00	\$1.50
2	\$2.00	\$3.00
3	\$3.00	\$4.50
4	\$4.00	\$6.00
5	\$5.00	\$7.50
6	\$6.00	\$9.00
7	\$7.00	\$10.50
8	\$8.00	\$12.00
9	\$9.00	\$13.50
10	\$10.00	\$15.00





Charting Data

Step 2: Identify what the **Y- Axis** will show.





Charting Data

Step 3: Identify the data you will be graphing and create a key to explain the symbols that will represent the data.

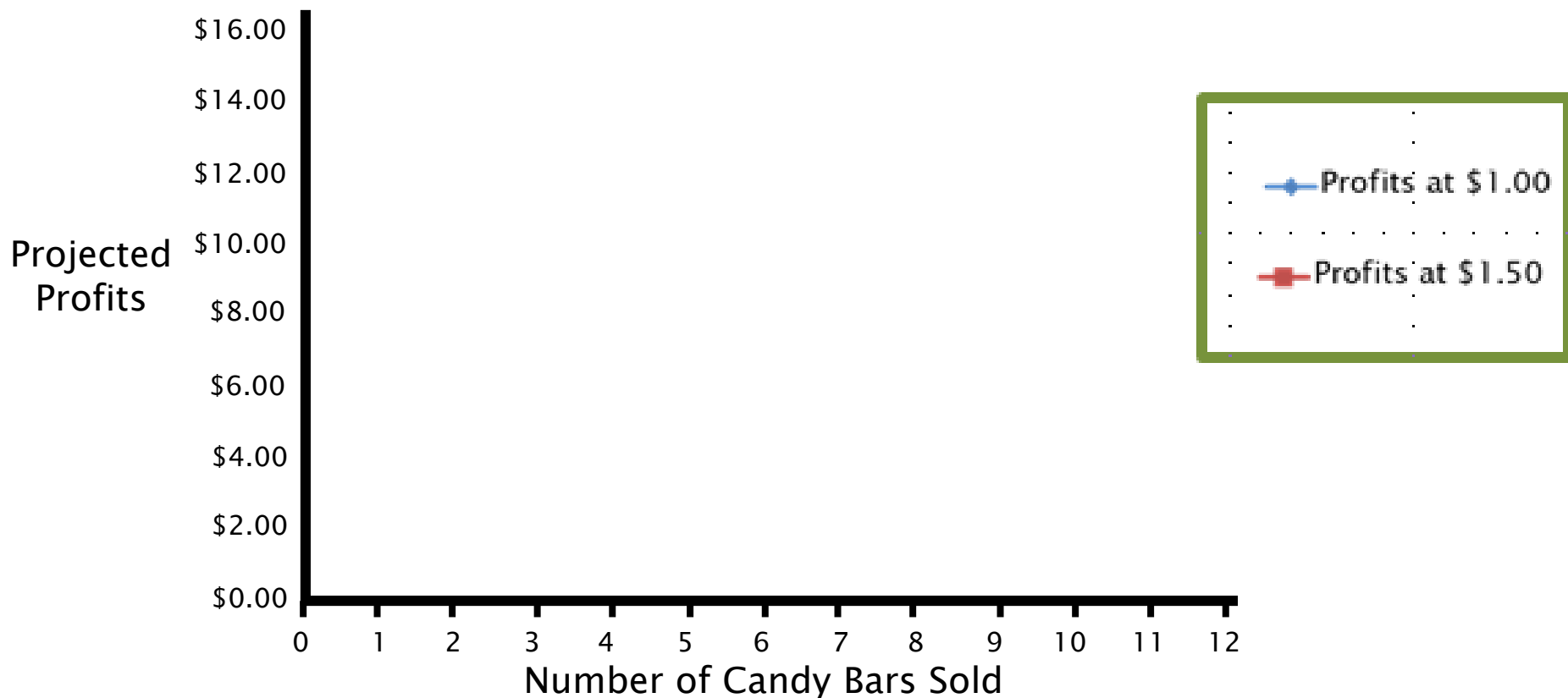
Candy Sold	Profits at \$1.00	Profits at \$1.50
1	\$1.00	\$1.50
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3	\$3.00	\$4.50
4	\$4.00	\$6.00
5	\$5.00	\$7.50
6	\$6.00	\$9.00
7	\$7.00	\$10.50
8	\$8.00	\$12.00
9	\$9.00	\$13.50
10	\$10.00	\$15.00





Charting Data

Step 3: Create a **Key**.

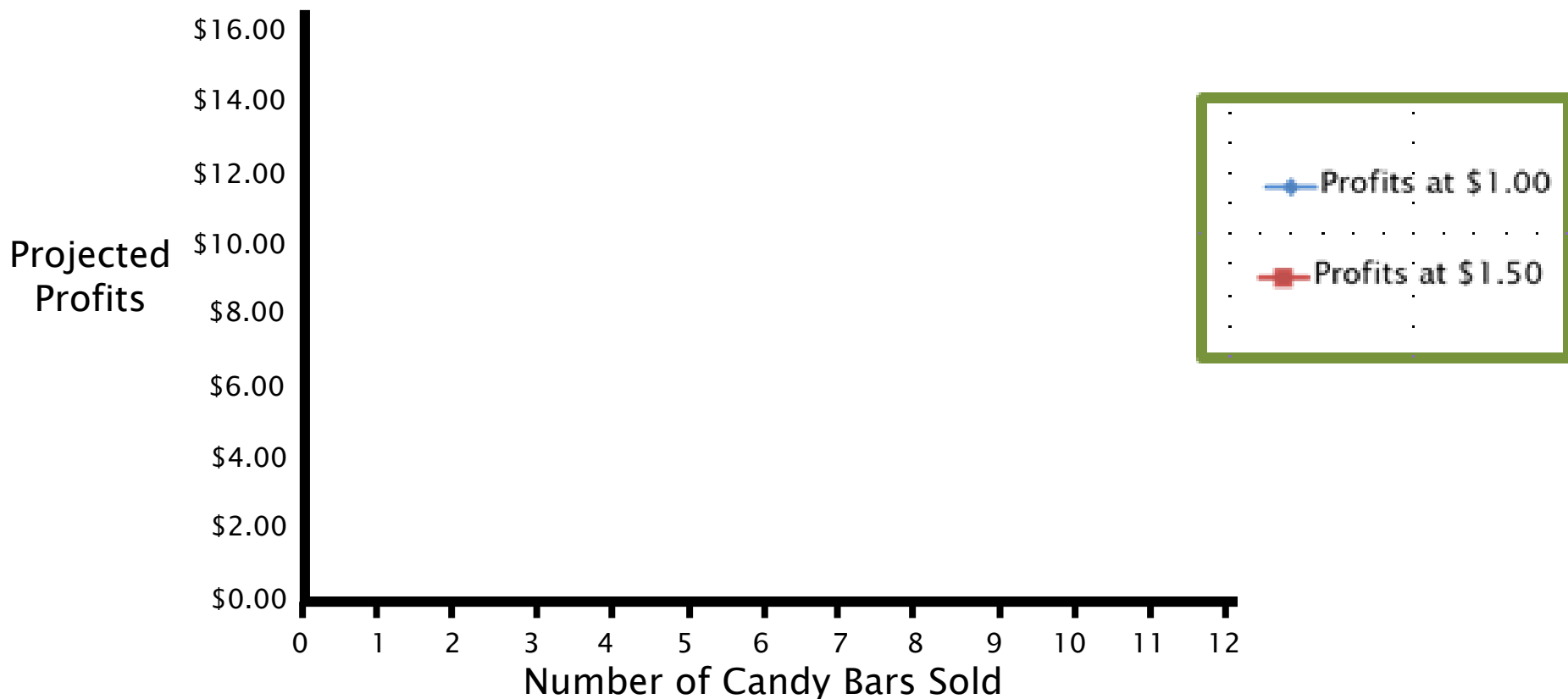




Charting Data

Step 4: Give the graph a **Title**.

Projected Profits Based on Sale Price

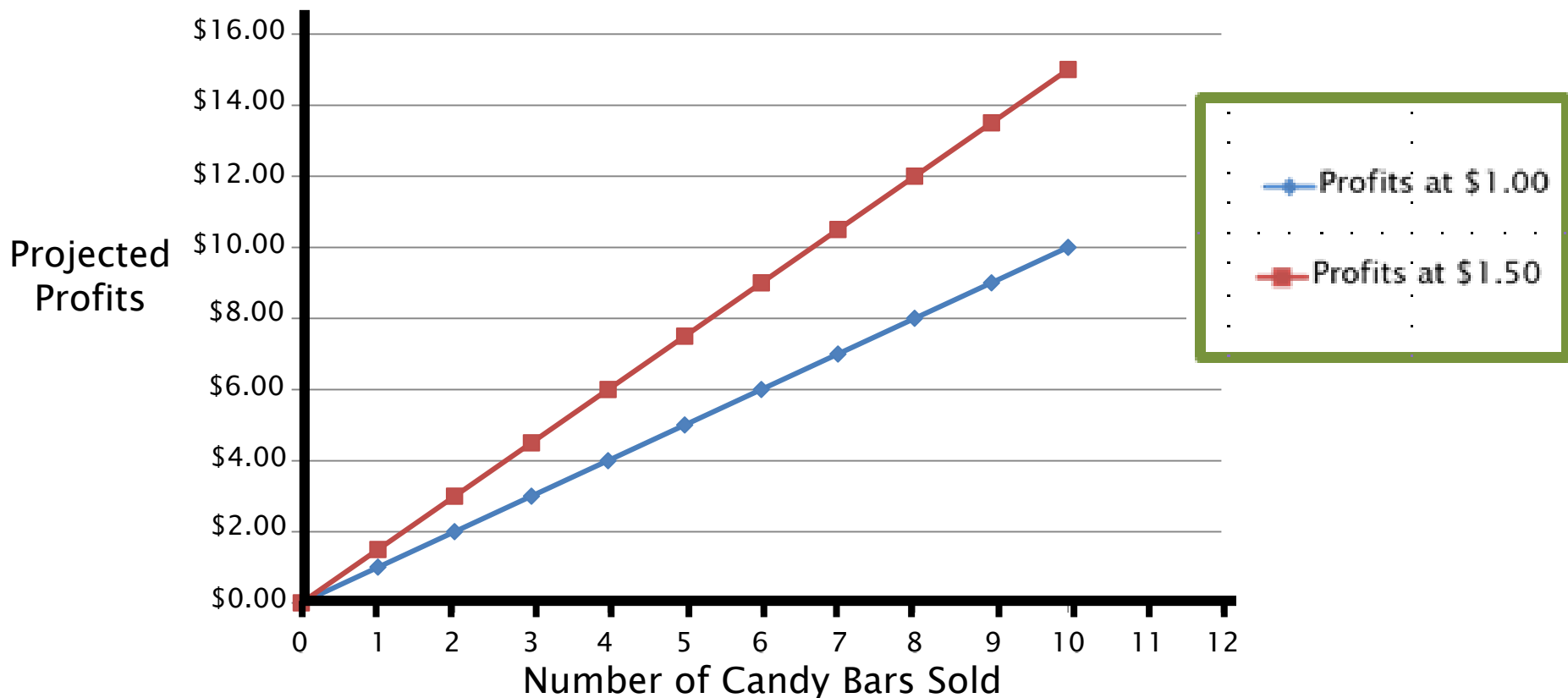




Charting Data

Step 5: Graph the Data.

Projected Profits Based on Sale Price

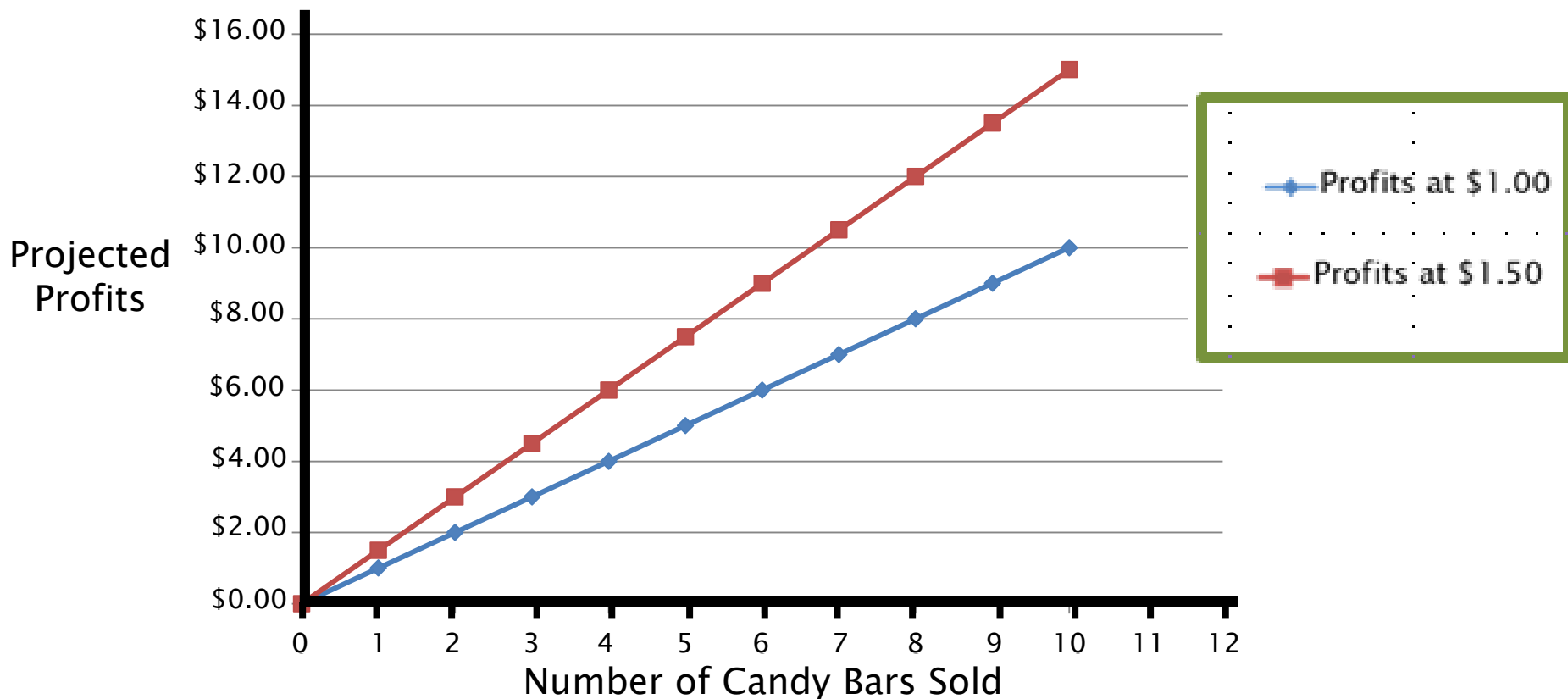




Charting Data

Which line has the larger slope?

Projected Profits Based on Sale Price

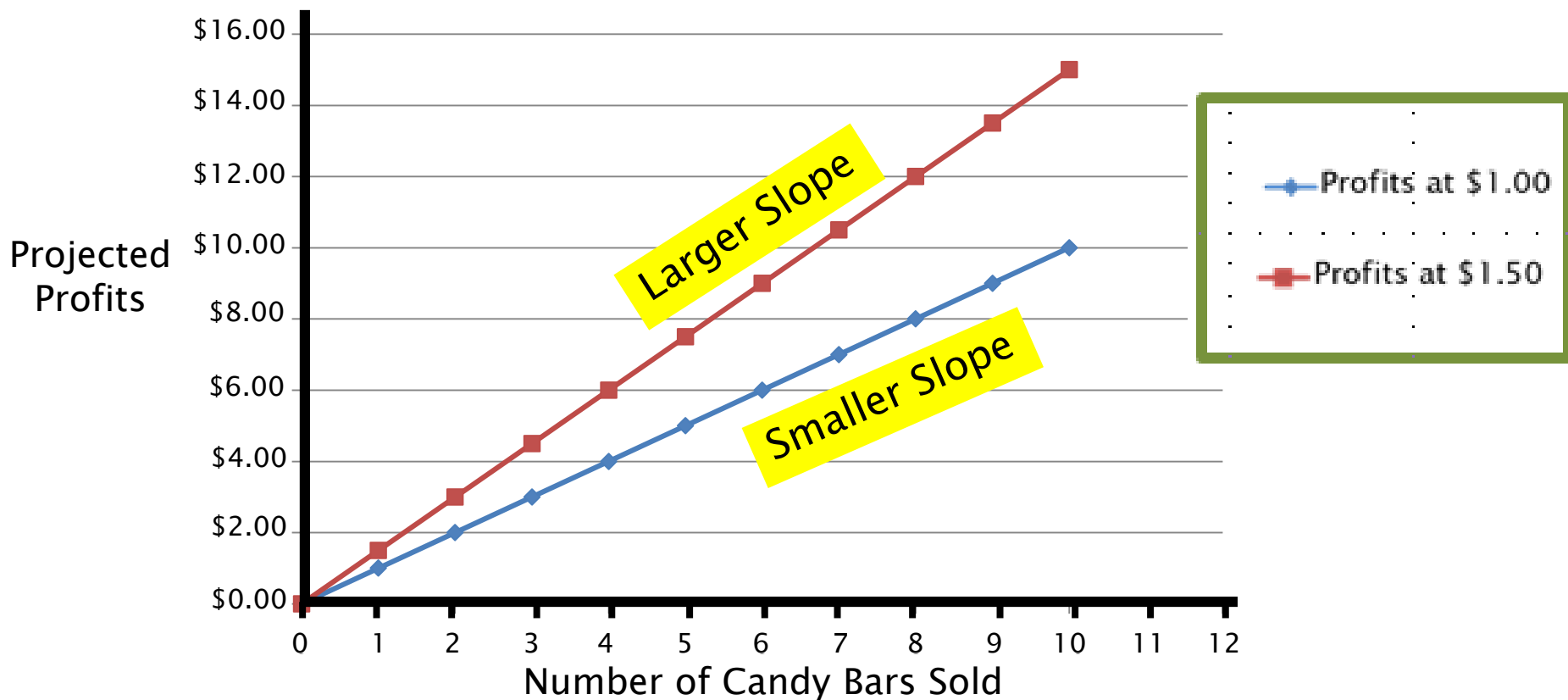




Charting Data

Which line has the larger slope?

Projected Profits Based on Sale Price





Charting Data

Calculate the slope for Profits at \$1.50.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$



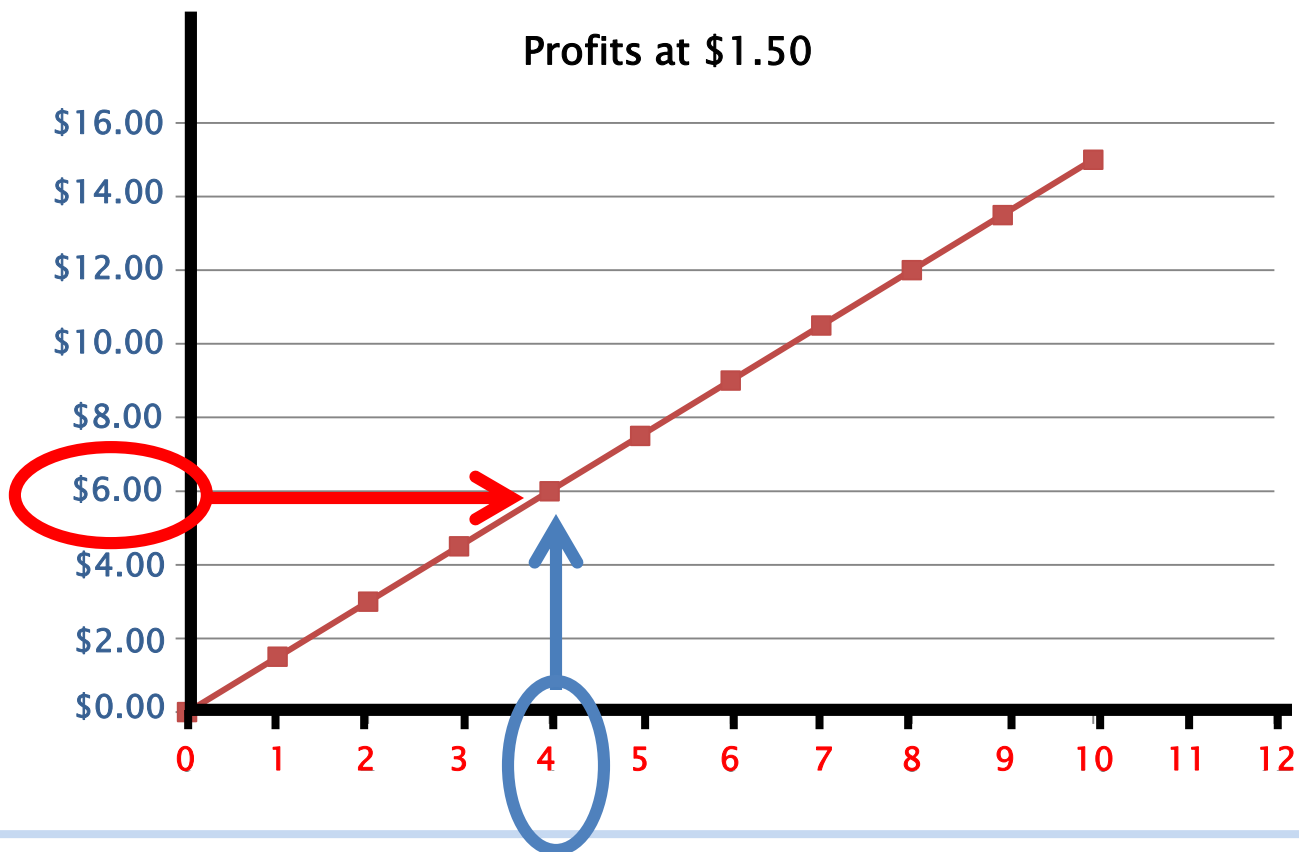


Charting Data

Calculate the slope for Profits at \$1.50.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{6}{4}$$





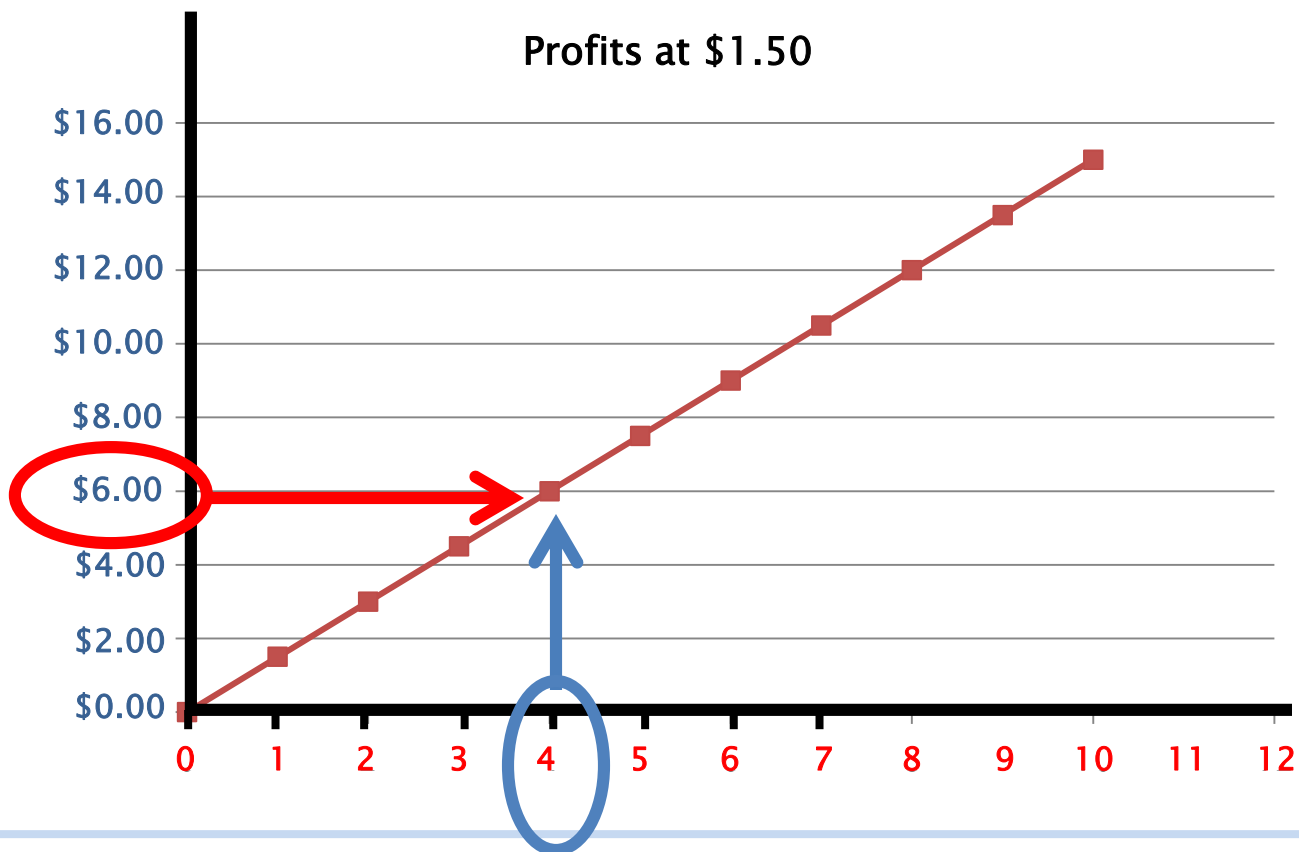
Charting Data

Calculate the slope for Profits at \$1.50.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{6}{4}$$

$$\text{Slope} = \frac{3}{2}$$





Charting Data

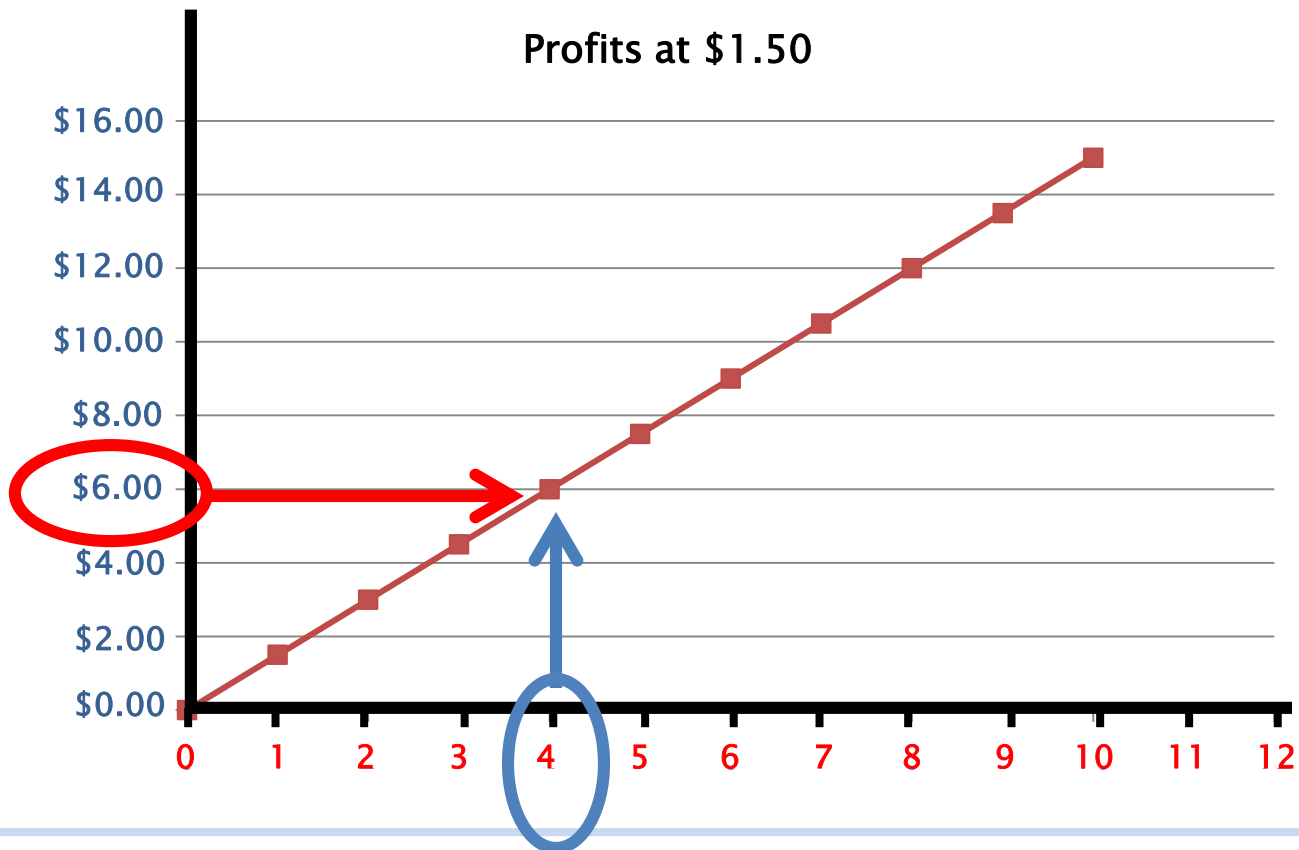
Calculate the slope for Profits at \$1.50.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{6}{4}$$

$$\text{Slope} = \frac{3}{2}$$

$$\text{Slope} = 1.5$$



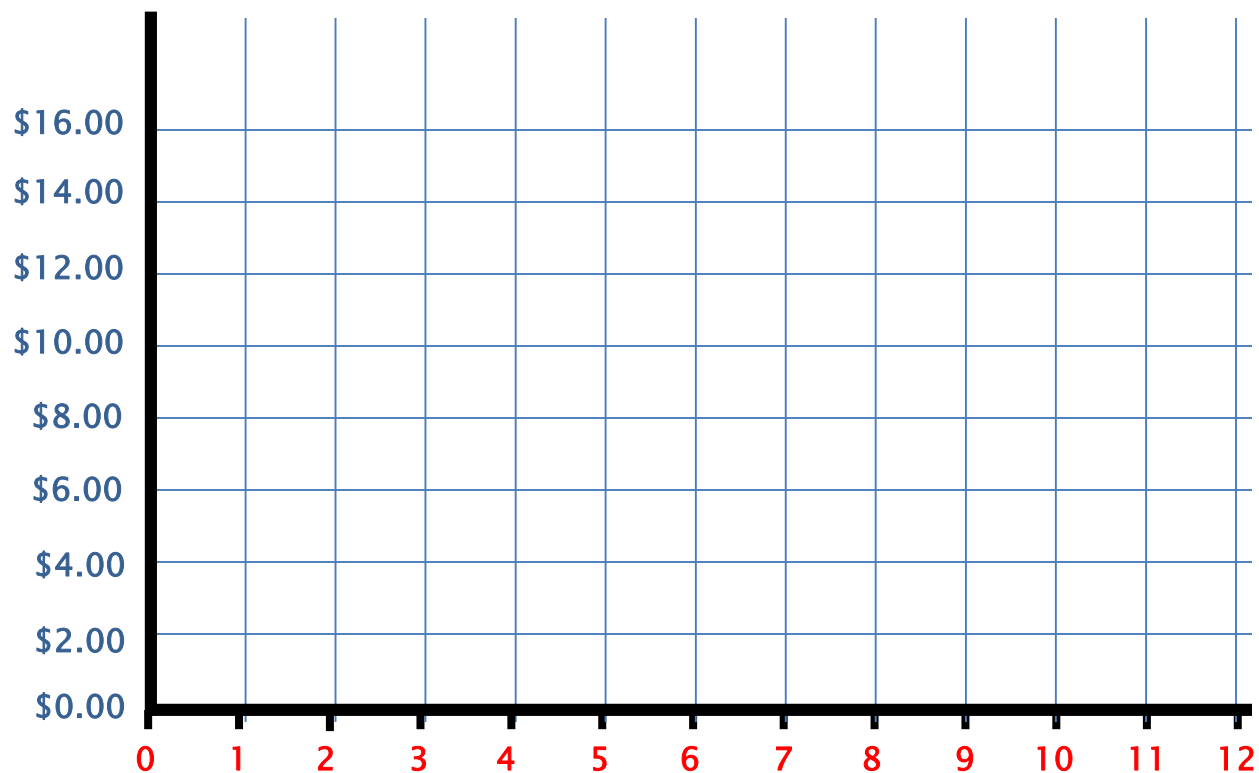


Practice

Calculate the slope for Profits at \$2.00

Assume you sold 4 candy bars.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$





Practice

Calculate the slope for Profits at \$2.00.

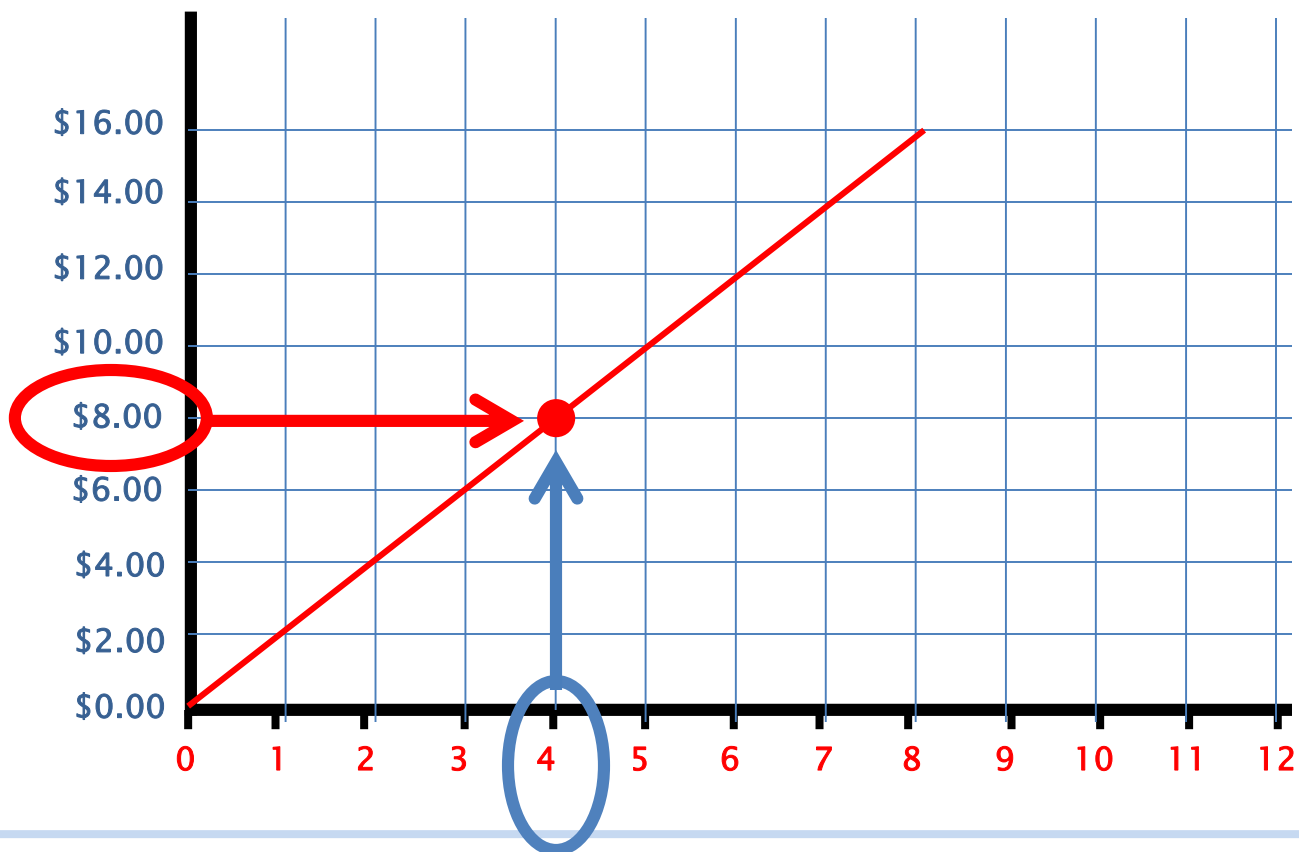
Assume you sold 4 candy bars.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{8}{4}$$

$$\text{Slope} = \frac{8}{2}$$

$$\text{Slope} = 2.0$$



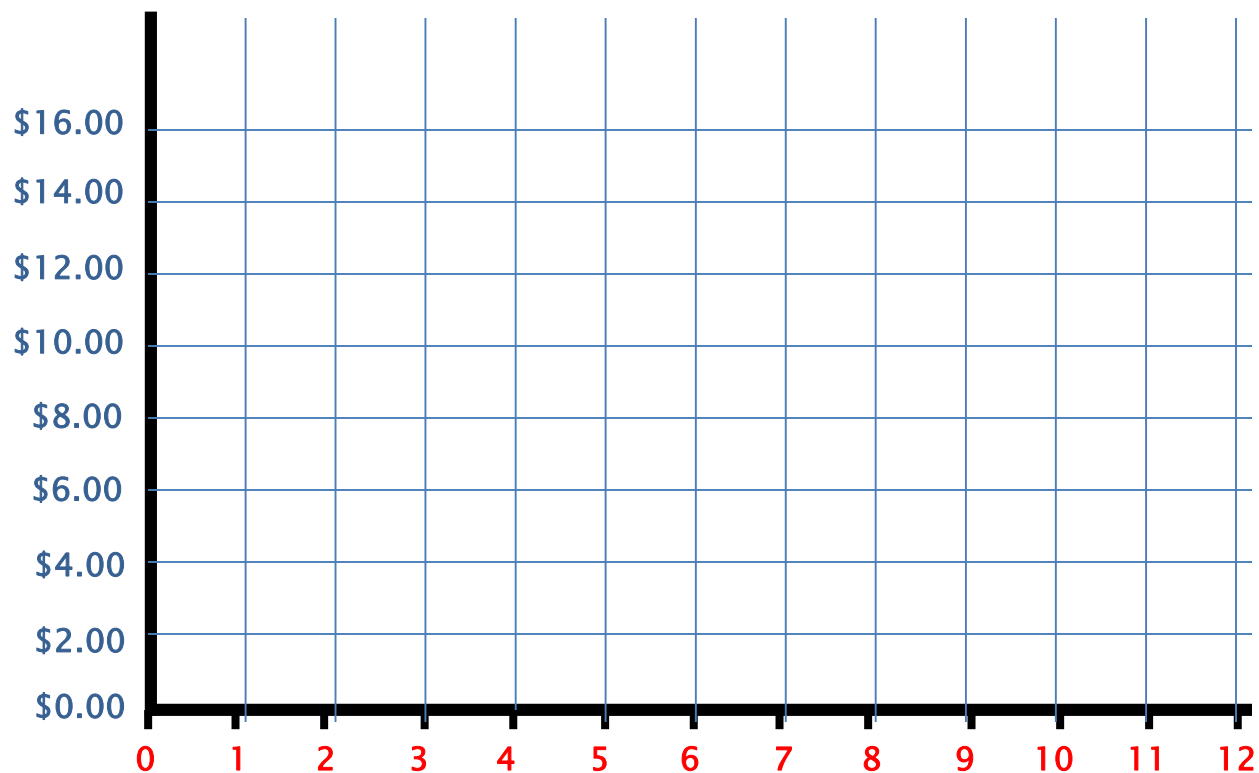


Practice

Calculate the slope for Profits at \$0.50.

Assume you sell 12 candy bars.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$





Practice

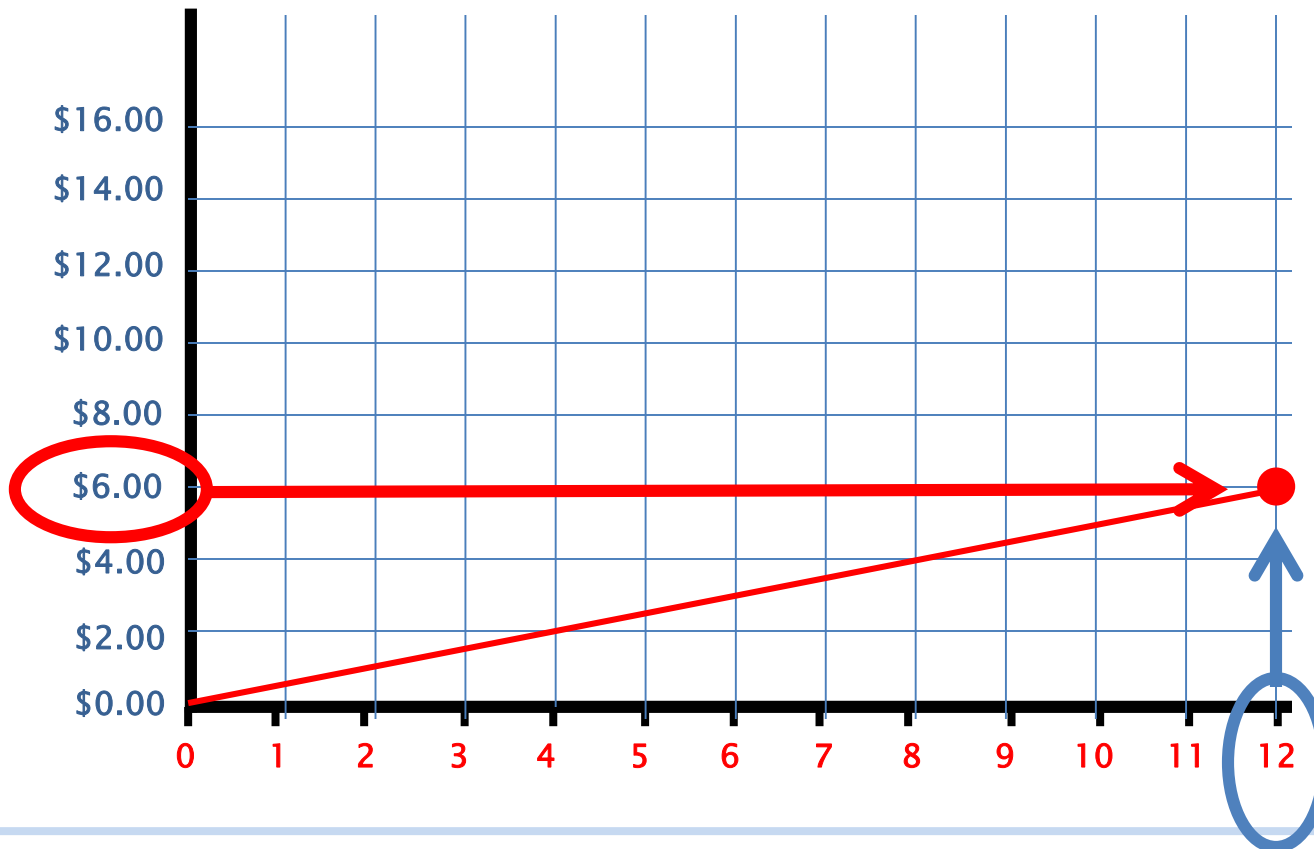
Calculate the slope for Profits at \$0.50.
Assume you sold 12 candy bars.

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{12}{6}$$

$$\text{Slope} = \frac{2}{1}$$

$$\text{Slope} = 0.5$$





Review:

1. Define the word Graph:
2. Calculate the slope for, and draw a graph to represent 10 candy bars sold for \$1.00 each.



Review:

1. Define the word Graph:

A picture representing a series of values and the relationship between them.

2. Calculate the slope for, and draw a graph to represent 10 candy bars sold for \$1.00 each.

$$\text{Slope} = 1.00$$

