

Name:

Date:

Period:

1

Big Idea: $y = \frac{\text{rise}}{\text{run}} x + y \text{ intercept}$

Given: $y = 4x + 1$

1. Rewrite to show slope as a fraction: $y = \frac{4}{1}x + 1$

2. Identify the rise: 4

3. Identify the run: 1

4. Identify the slope: $\frac{4}{1}$

5. Identify the y-intercept: 1

6. Interpret: Every time x changes by 1, the value of y changes by 4.

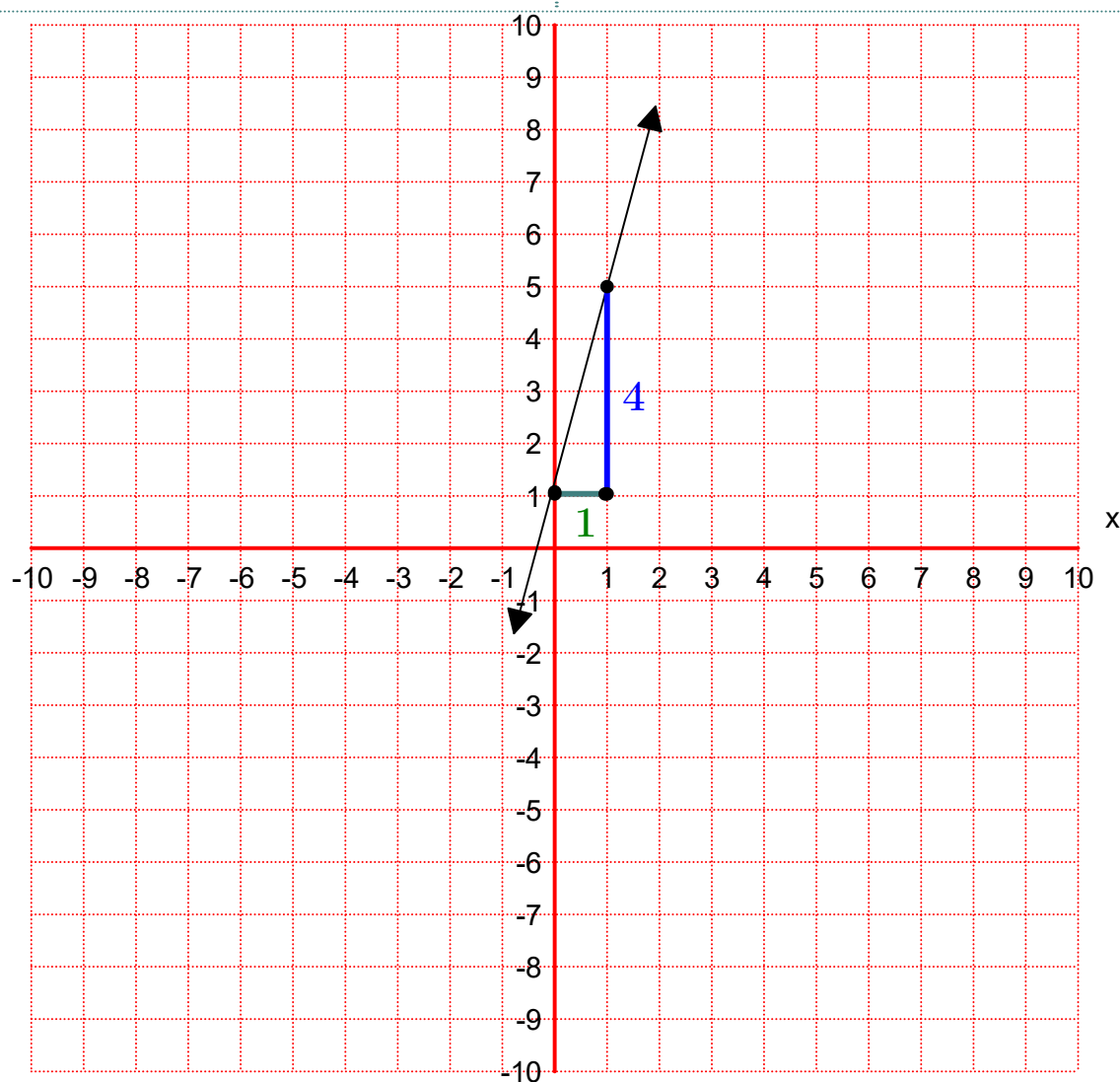
Graph: $y = 4x + 1$

1. Mark the point where the line crosses the y axis. That point is (0,1)

2. Mark the run. This means draw a horizontal line segment 1 unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is 4 units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

2

Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 2x + 3$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

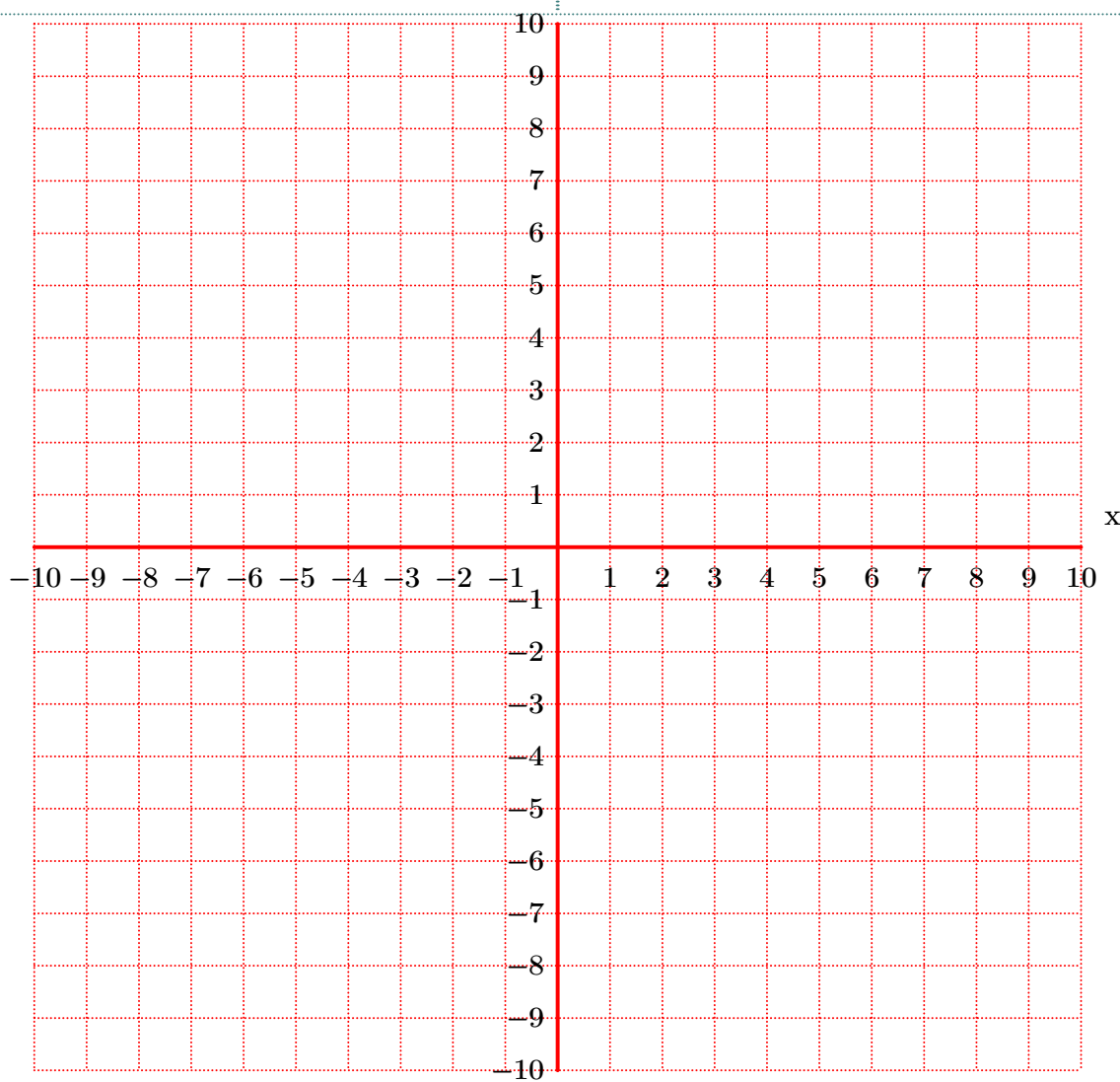
Graph: $y = 2x + 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

3

Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 4x - 2$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

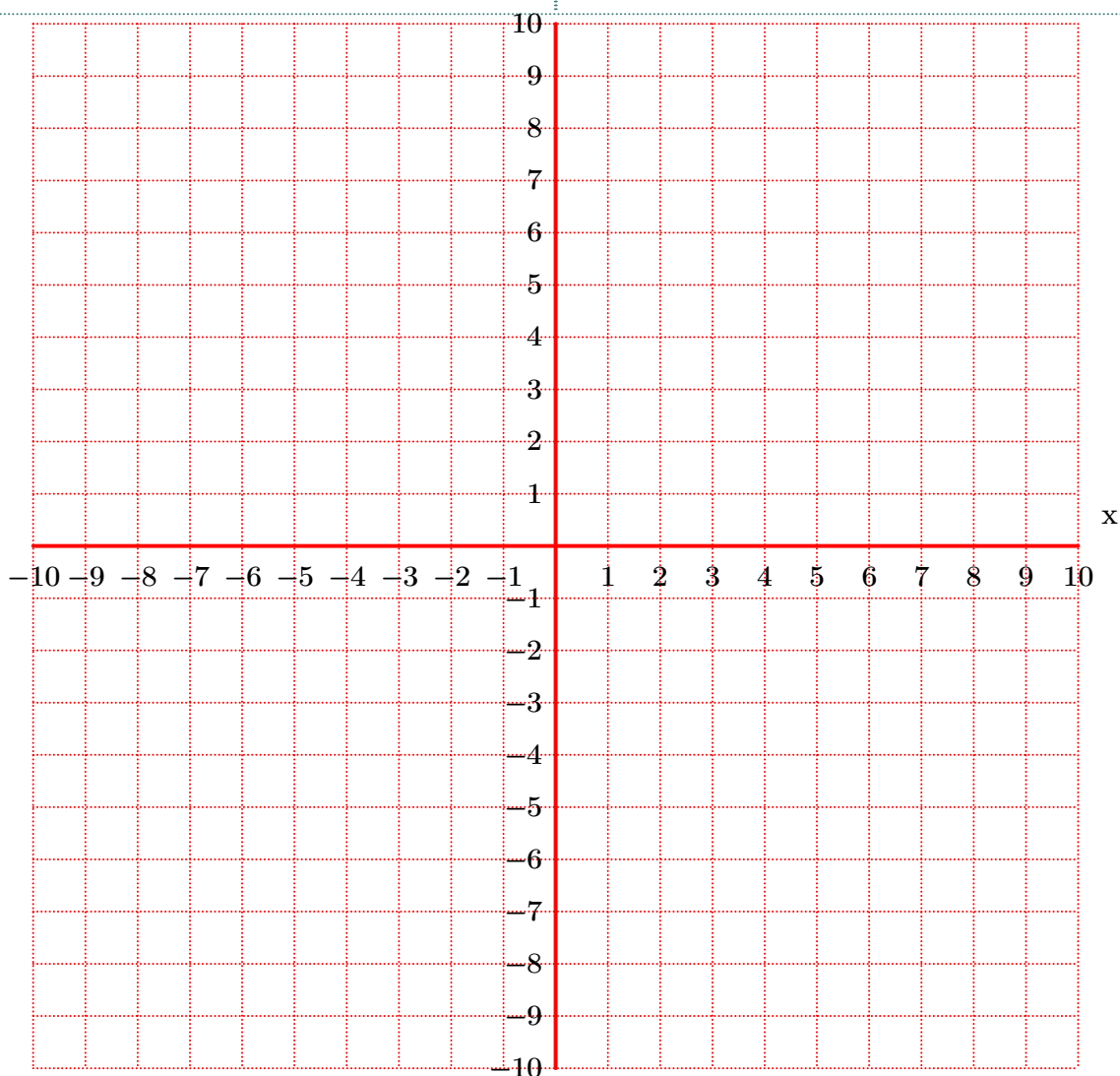
Graph: $y = 4x - 2$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

4

Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 4x + 4$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

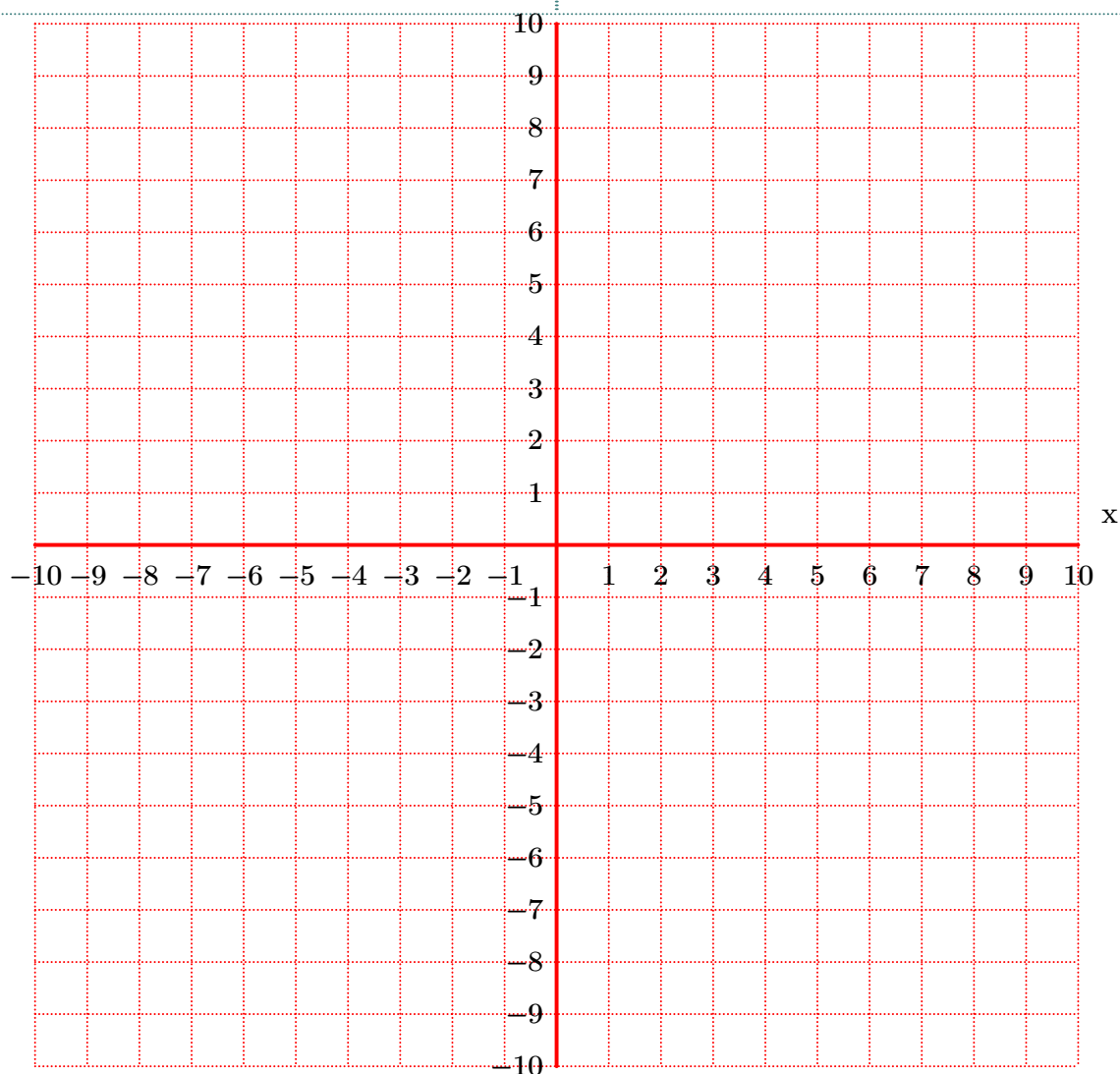
Graph: $y = 4x + 4$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

5

Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -3x - 5$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

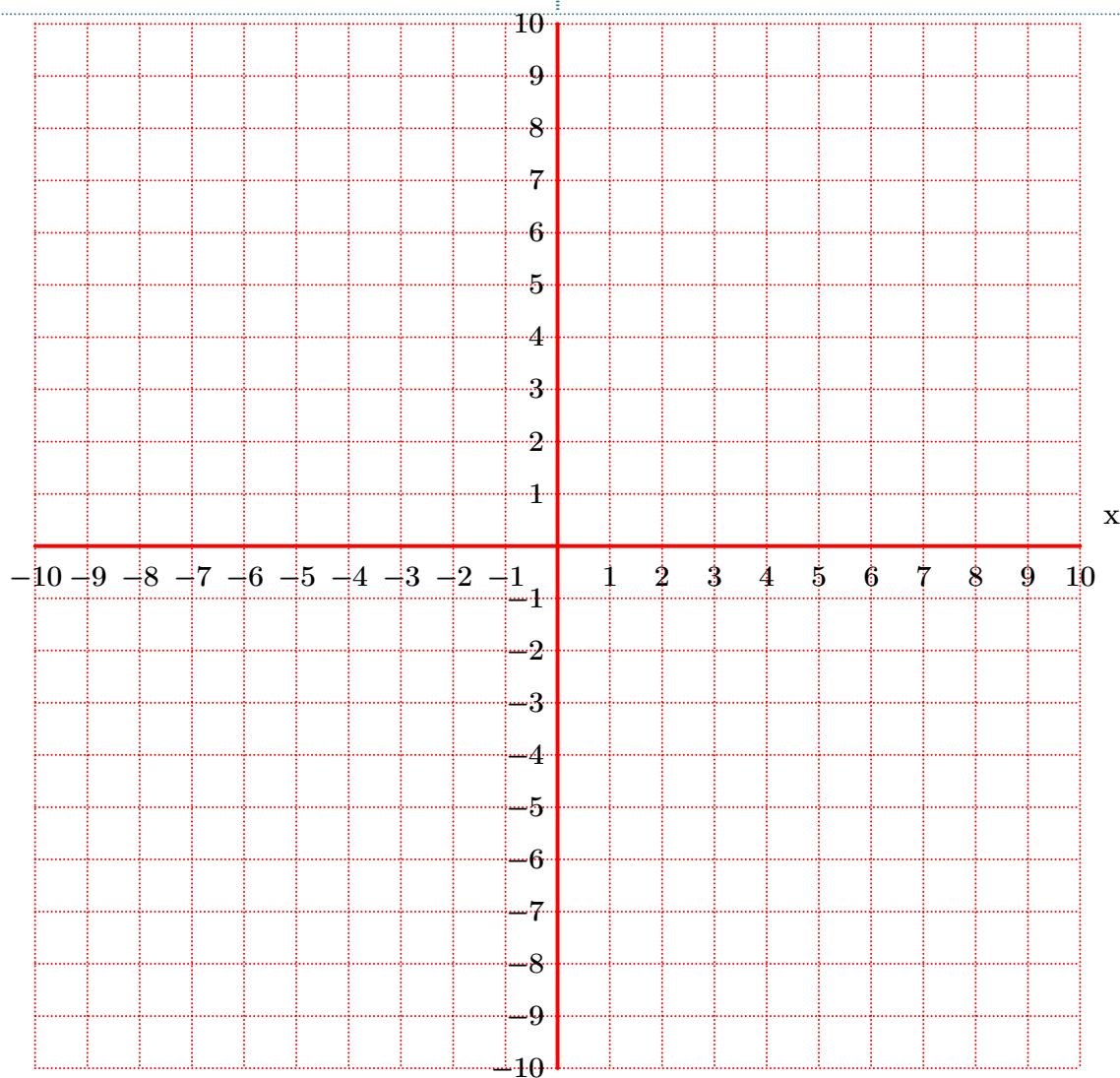
Graph: $y = -3x - 5$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -2x - 3$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

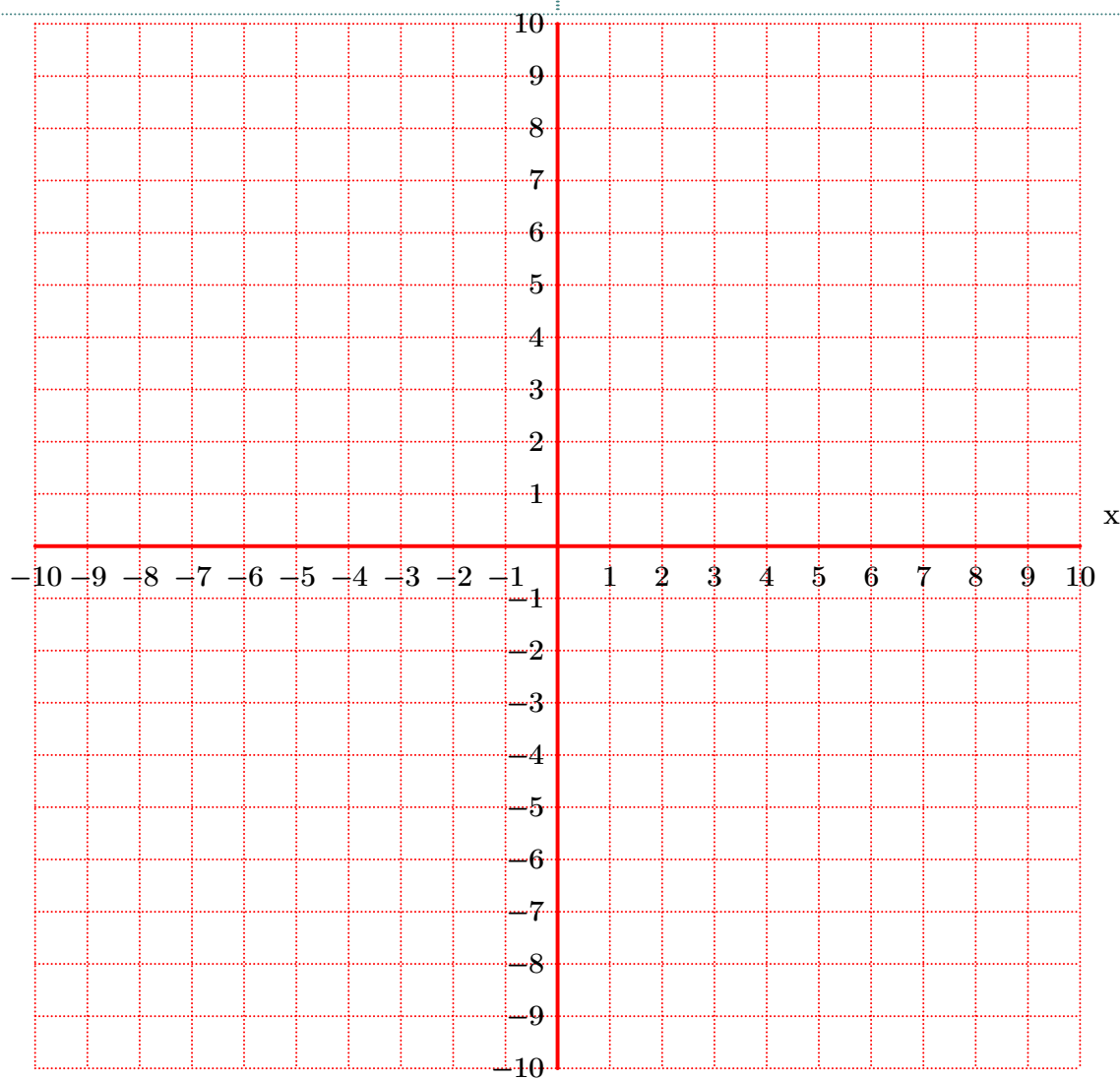
Graph: $y = -2x - 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



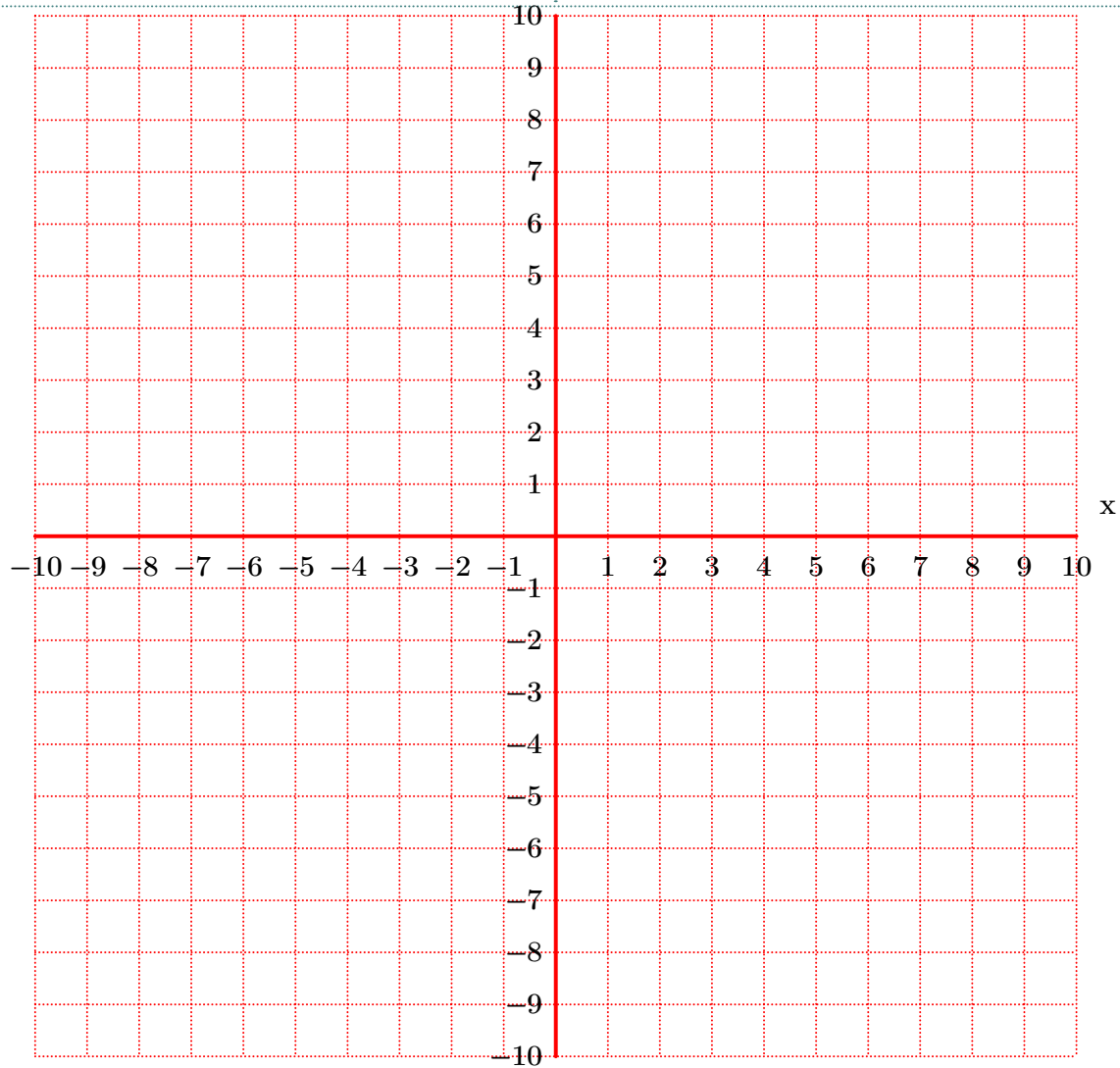
Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 3x - 4$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$
2. Identify the rise:
3. Identify the run:
4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$
5. Identify the y-intercept: $\boxed{}$
6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

Graph: $y = 3x - 4$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$
2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.
3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.
4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

8

Big Idea: $y = \frac{\text{rise}}{\text{run}} x + y \text{ intercept}$

Given: $y = -1x + 0$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}} x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope:

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

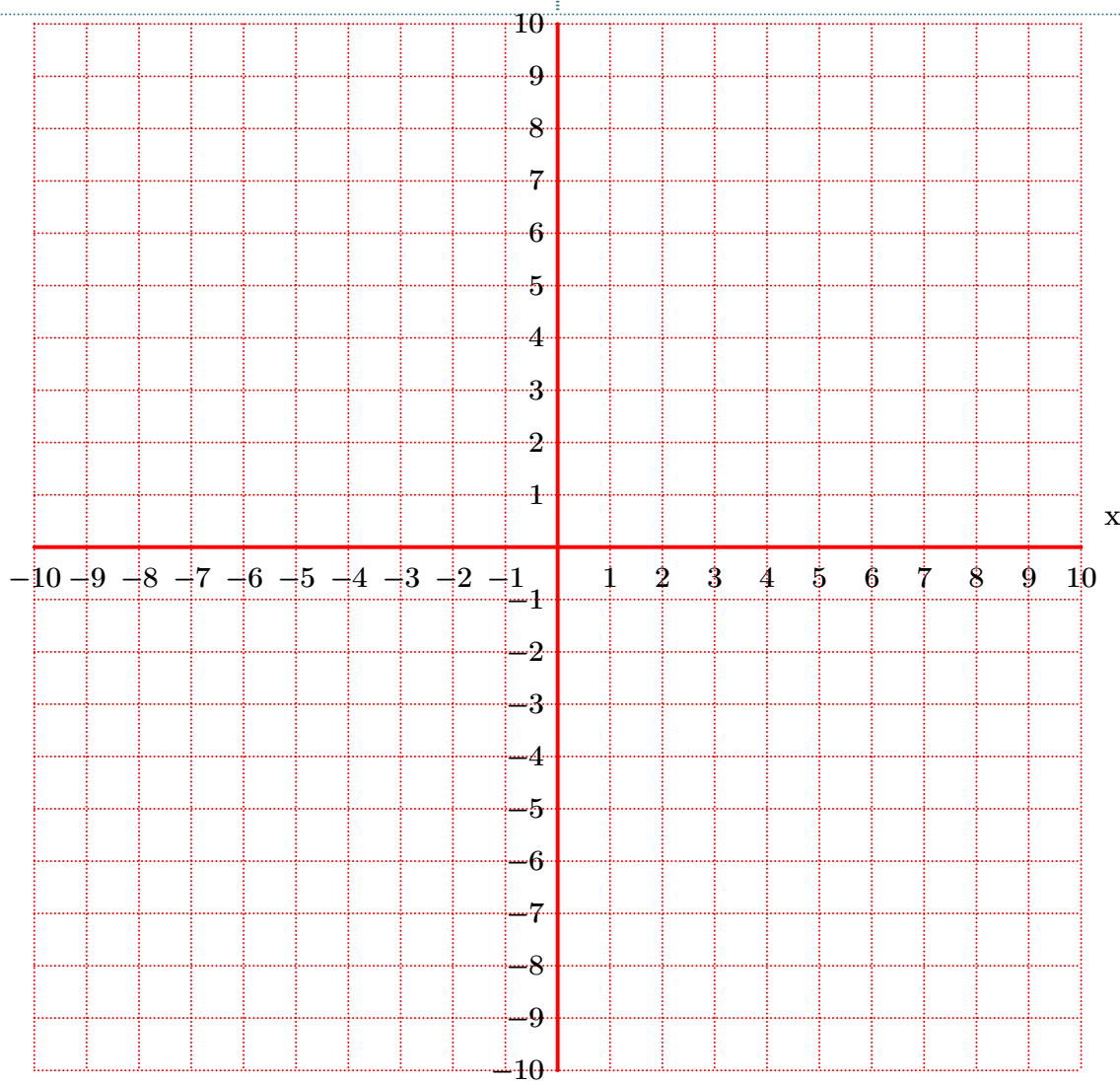
Graph: $y = -1x + 0$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -1x + 2$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

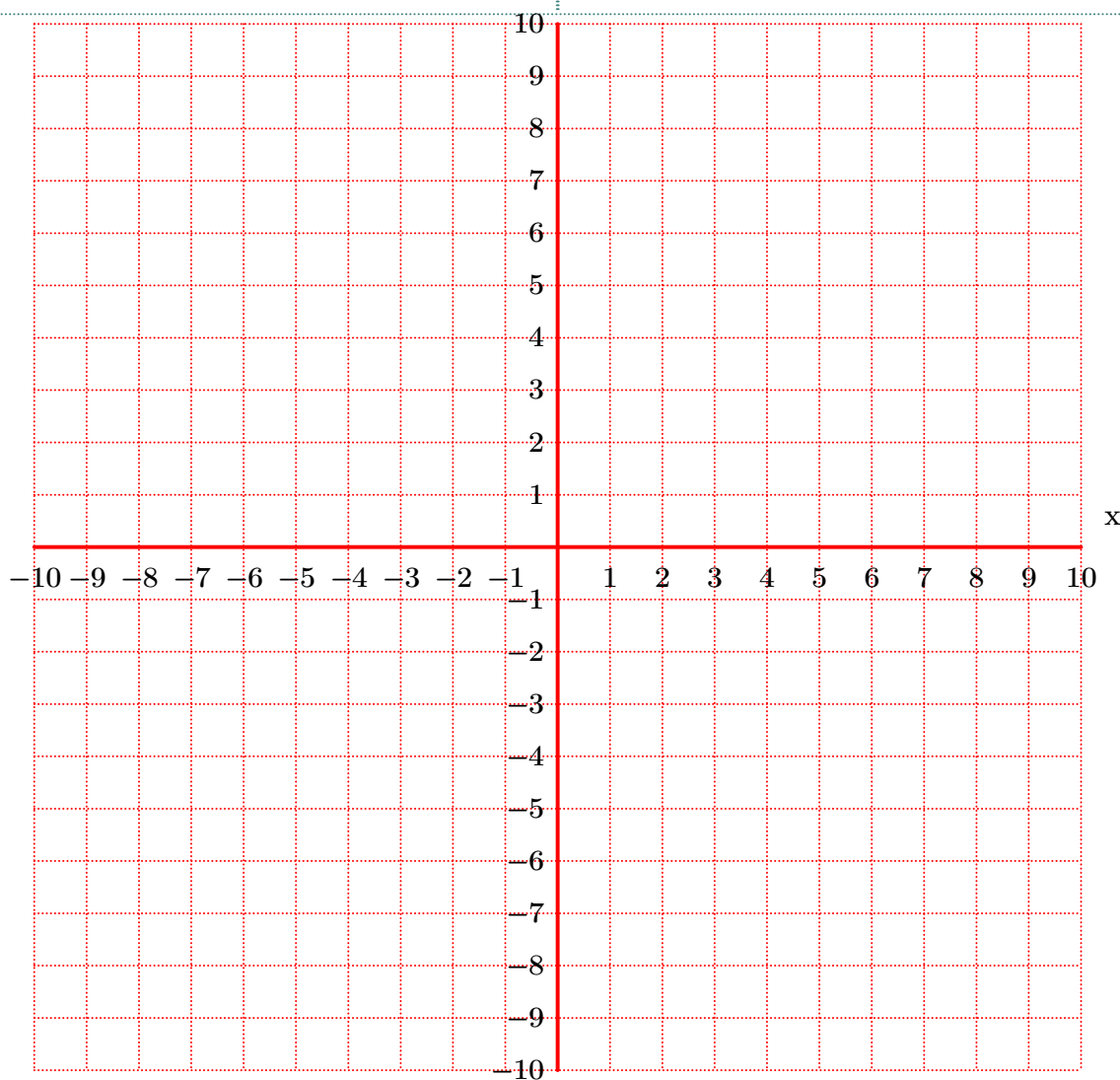
Graph: $y = -1x + 2$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -5x + 5$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

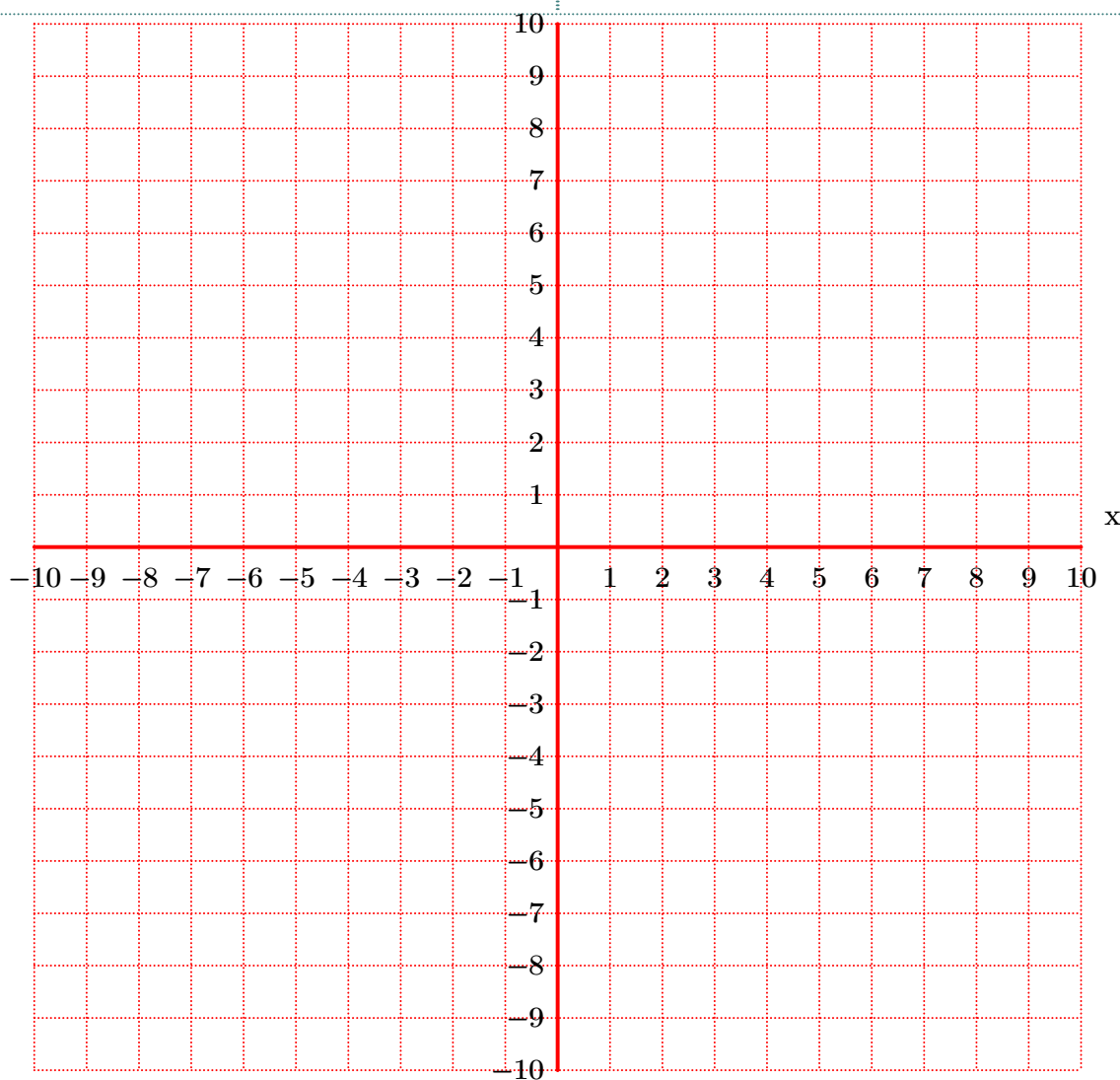
Graph: $y = -5x + 5$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



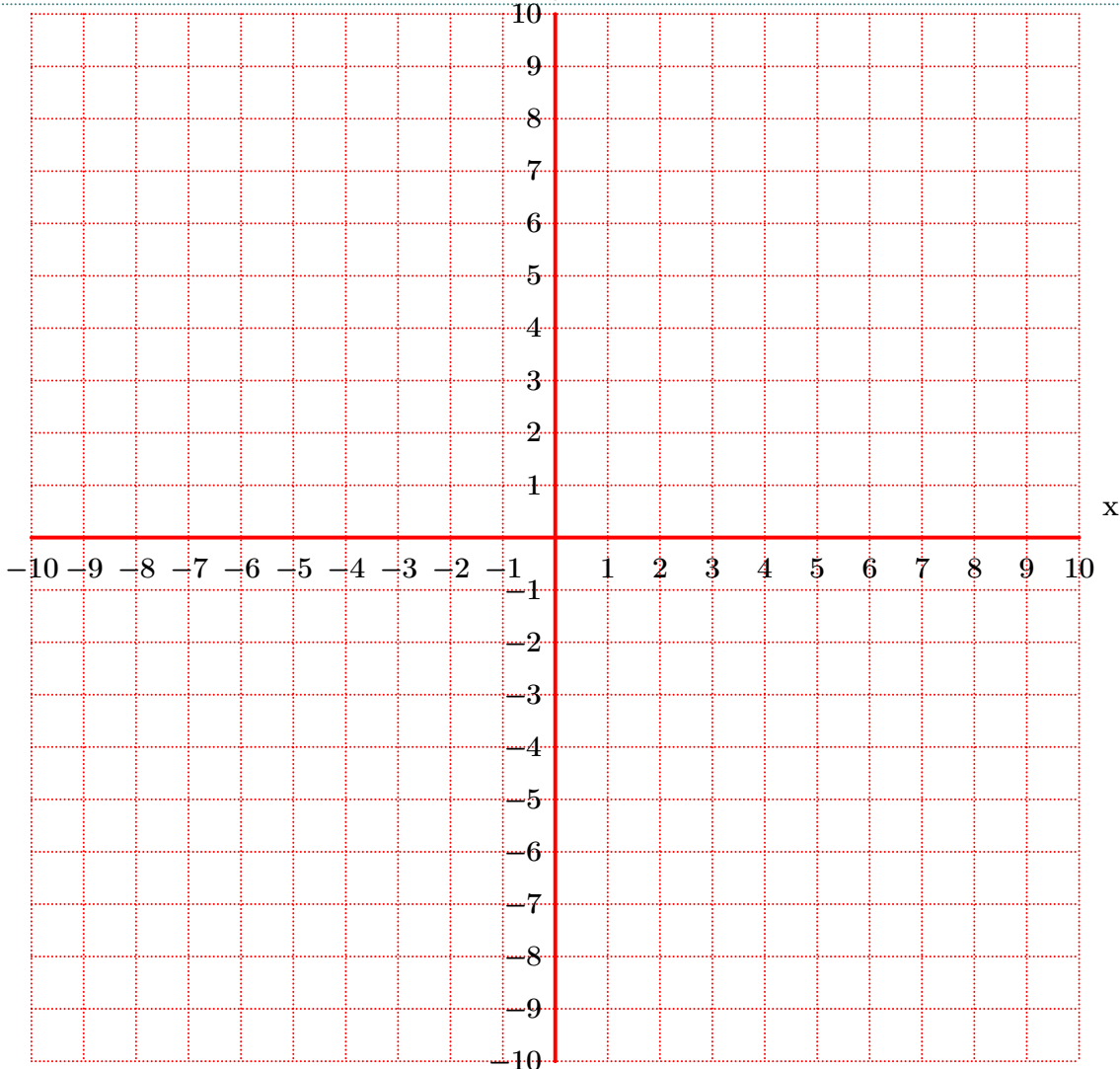
Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -1x + 3$

1. Rewrite to show slope as a fraction: $y = \frac{\square}{\square}x + \square$
2. Identify the rise: 3. Identify the run:
4. Identify the slope: 5. Identify the y-intercept: \square
6. Interpret: Every time x changes by \square , the value of y changes by \square .

Graph: $y = -1x + 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \square)$
2. Mark the run. This means draw a horizontal line segment \square unit long from the y intercept.
3. Draw the rise. This means draw a vertical line segment that is \square units long starting from the end of the run.
4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

12

Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -1x + 1$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

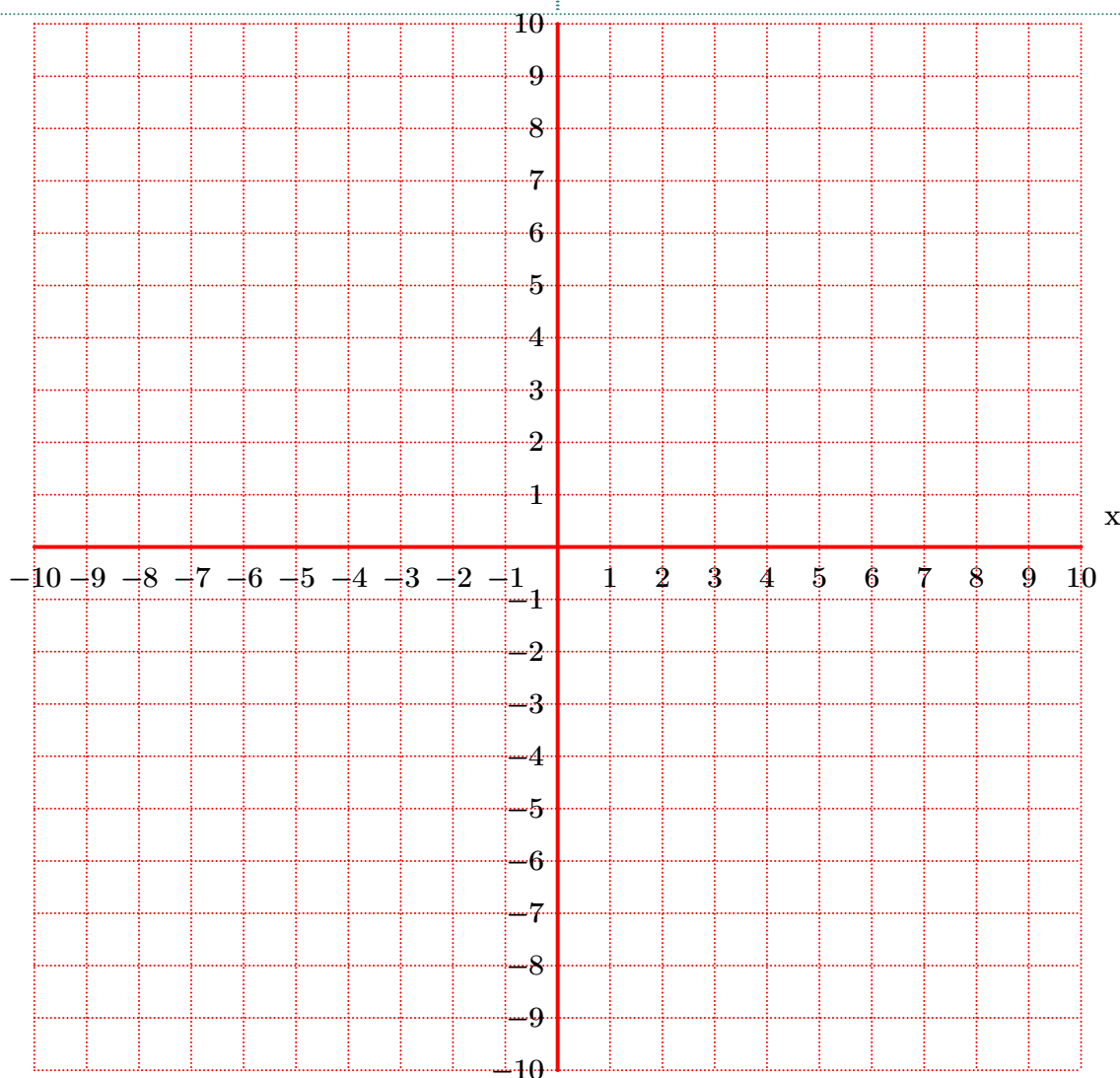
Graph: $y = -1x + 1$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

13

Big Idea: $y = \frac{\text{rise}}{\text{run}} x + y \text{ intercept}$

Given: $y = -2x + 0$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}} x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

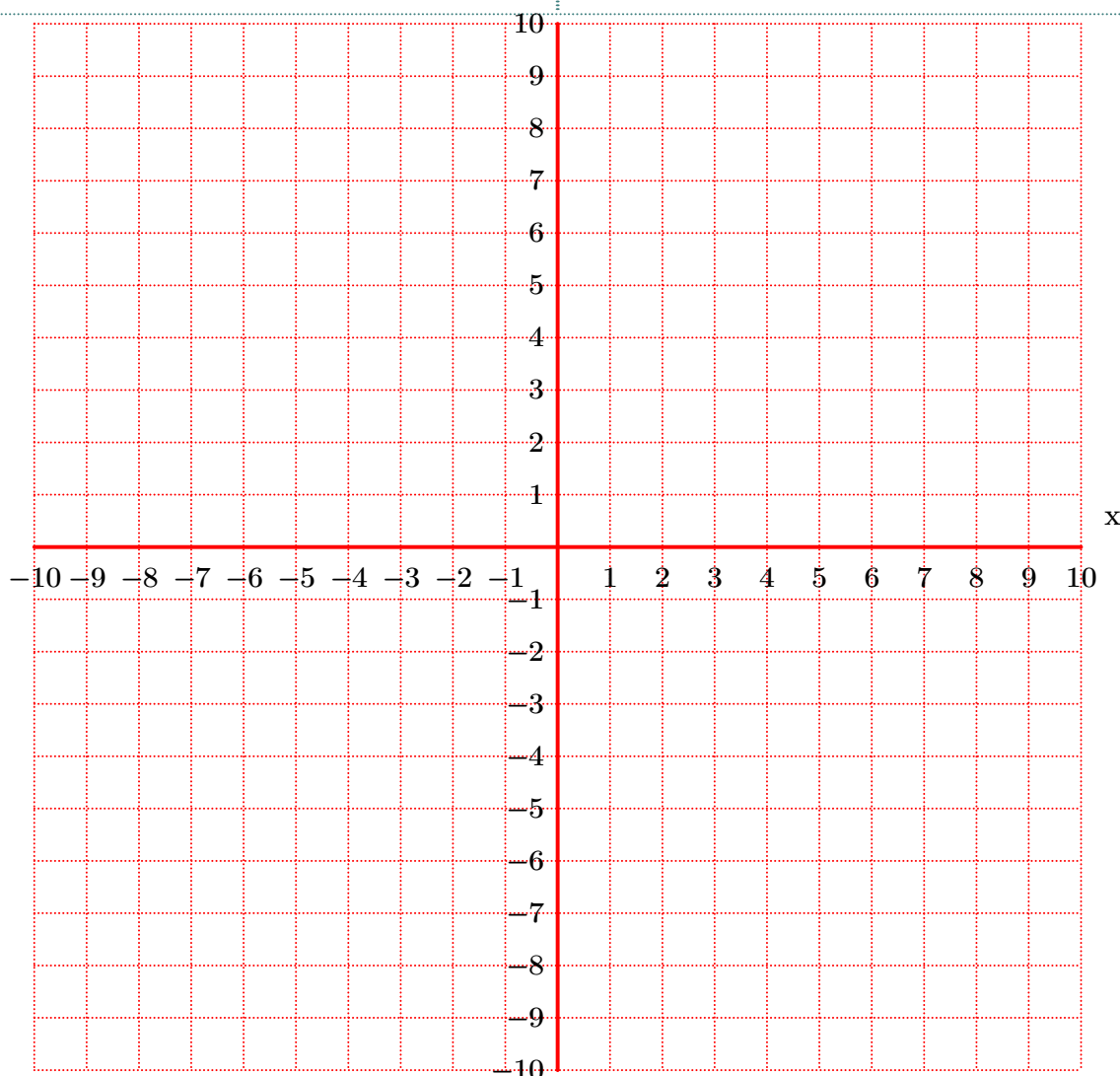
Graph: $y = -2x + 0$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



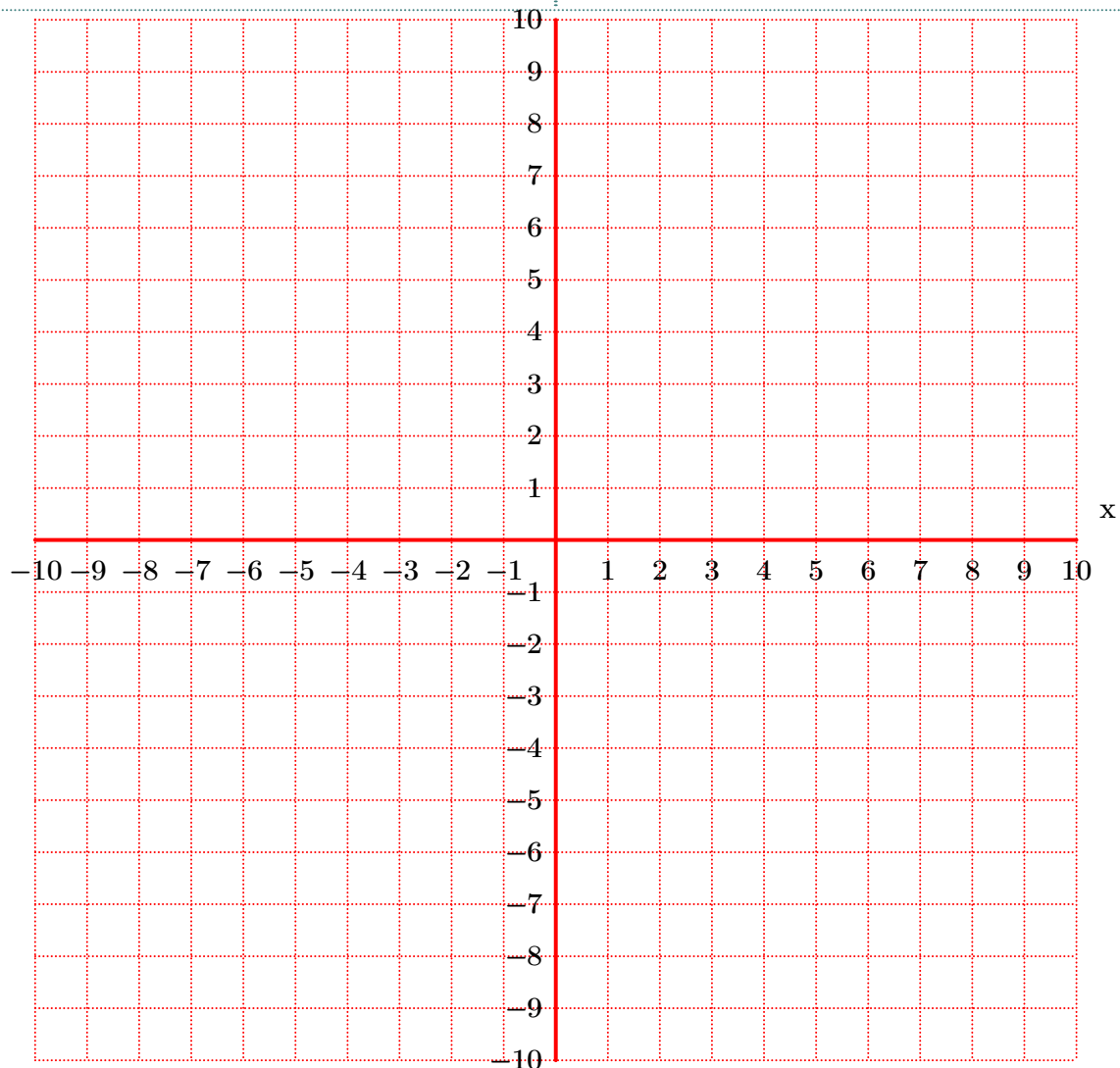
Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -1x - 2$

1. Rewrite to show slope as a fraction: $y = \frac{\square}{\square}x + \square$
2. Identify the rise: 3. Identify the run:
4. Identify the slope: 5. Identify the y-intercept: \square
6. Interpret: Every time x changes by \square , the value of y changes by \square .

Graph: $y = -1x - 2$

1. Mark the point where the line crosses the y axis.
That point is $(0, \square)$
2. Mark the run. This means draw a horizontal line segment \square unit long from the y intercept.
3. Draw the rise. This means draw a vertical line segment that is \square units long starting from the end of the run.
4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -5x + 3$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

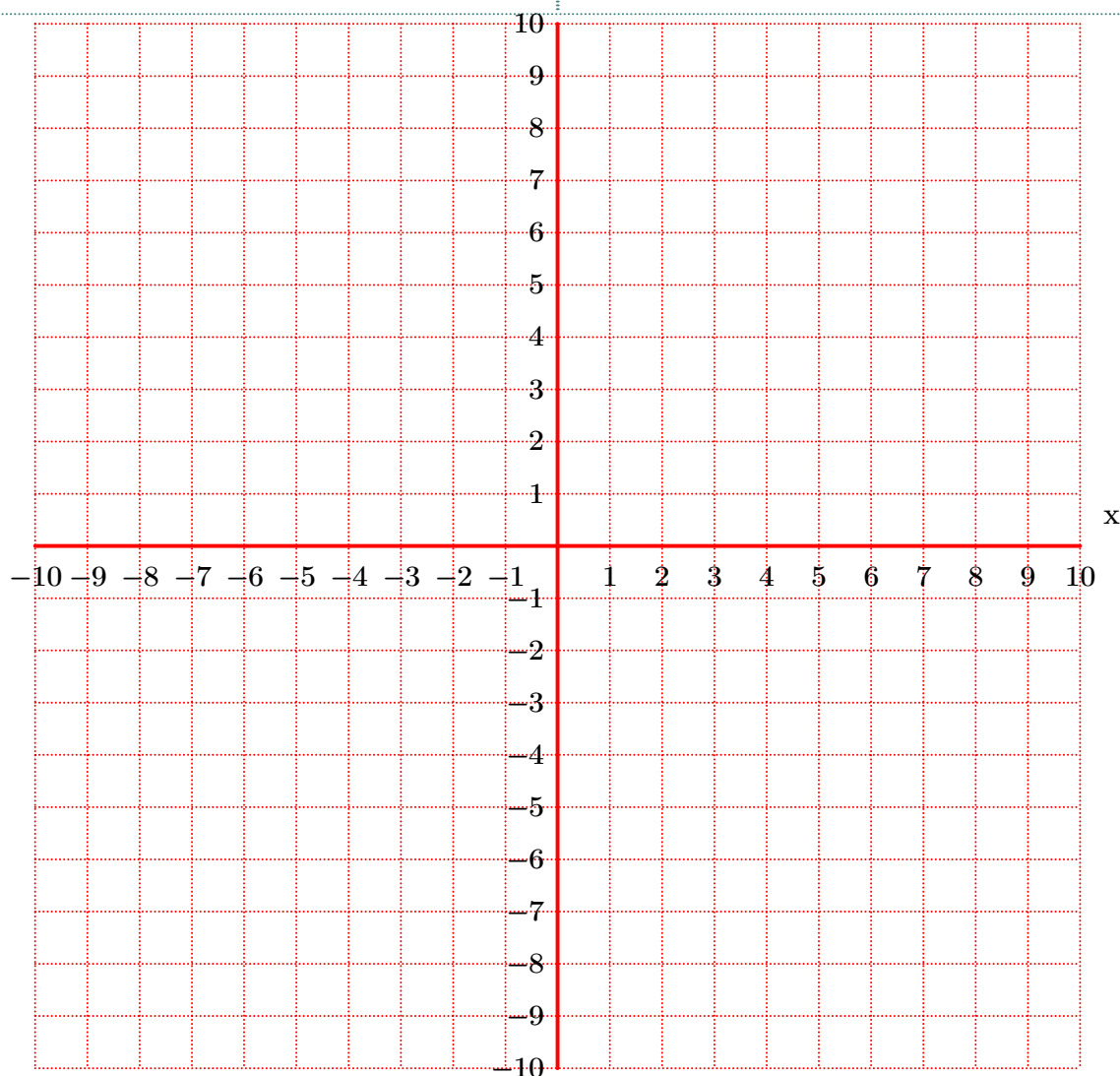
Graph: $y = -5x + 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -1x - 3$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

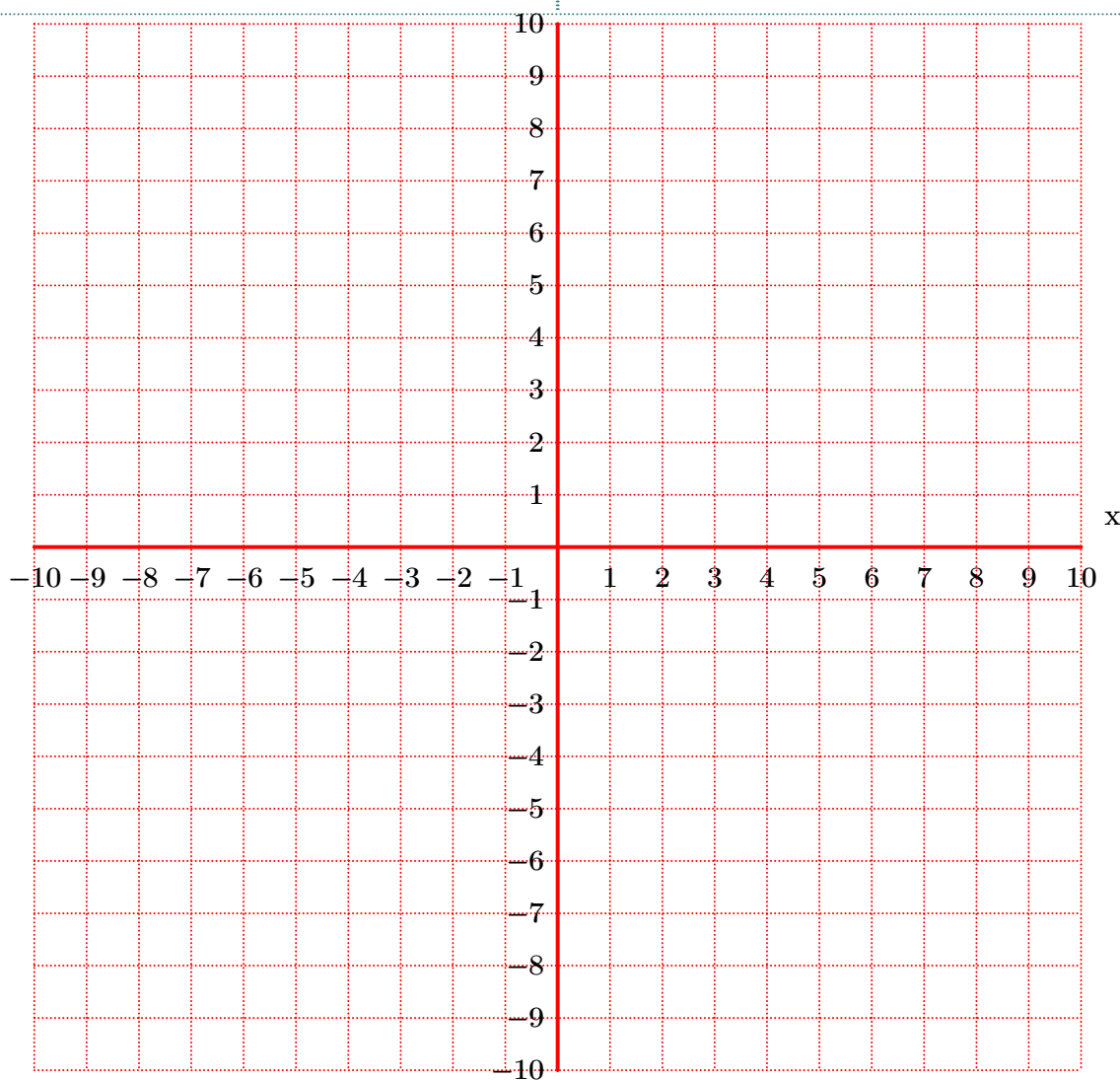
Graph: $y = -1x - 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 3x + 5$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

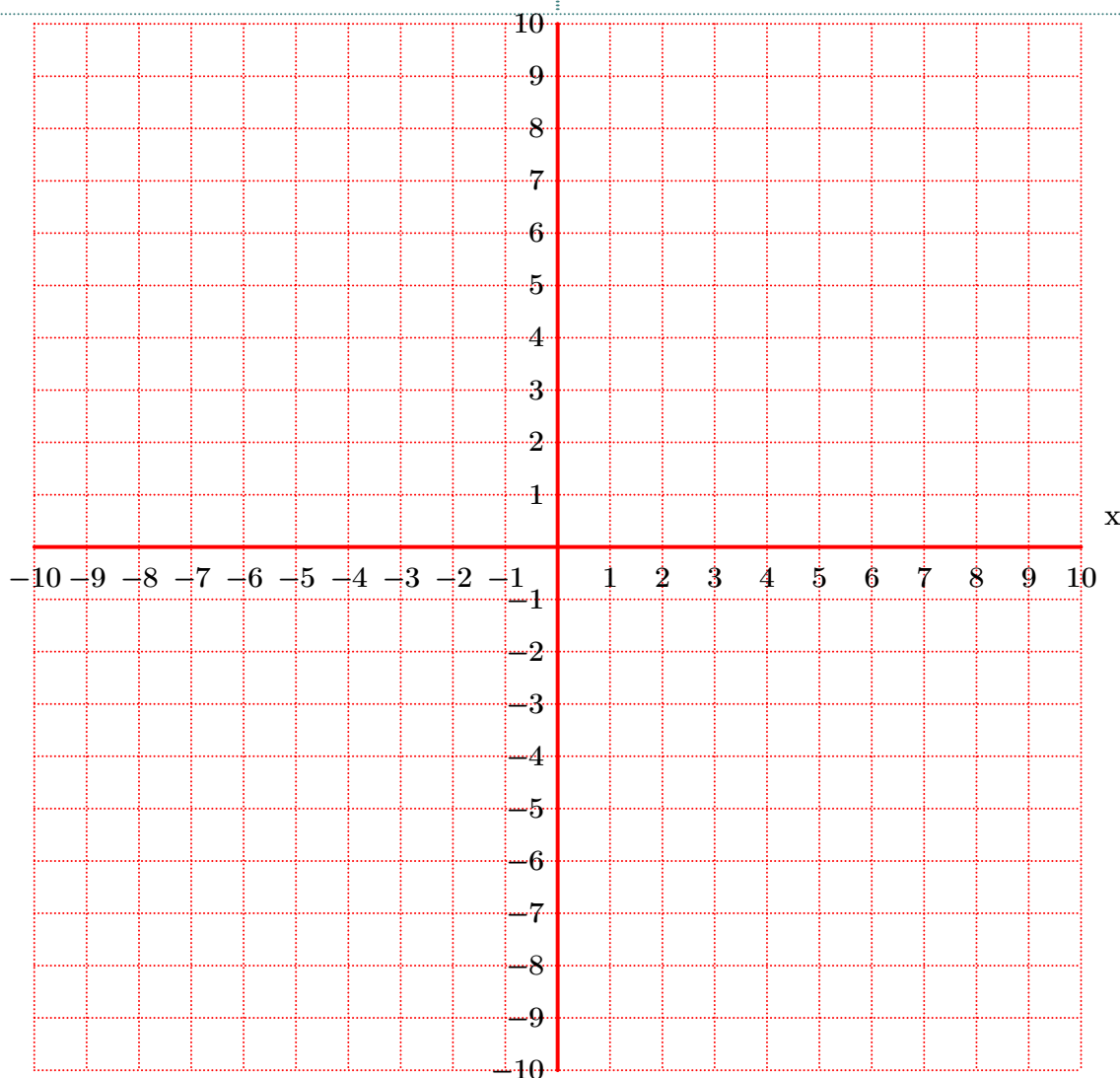
Graph: $y = 3x + 5$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = -4x - 3$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}}x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

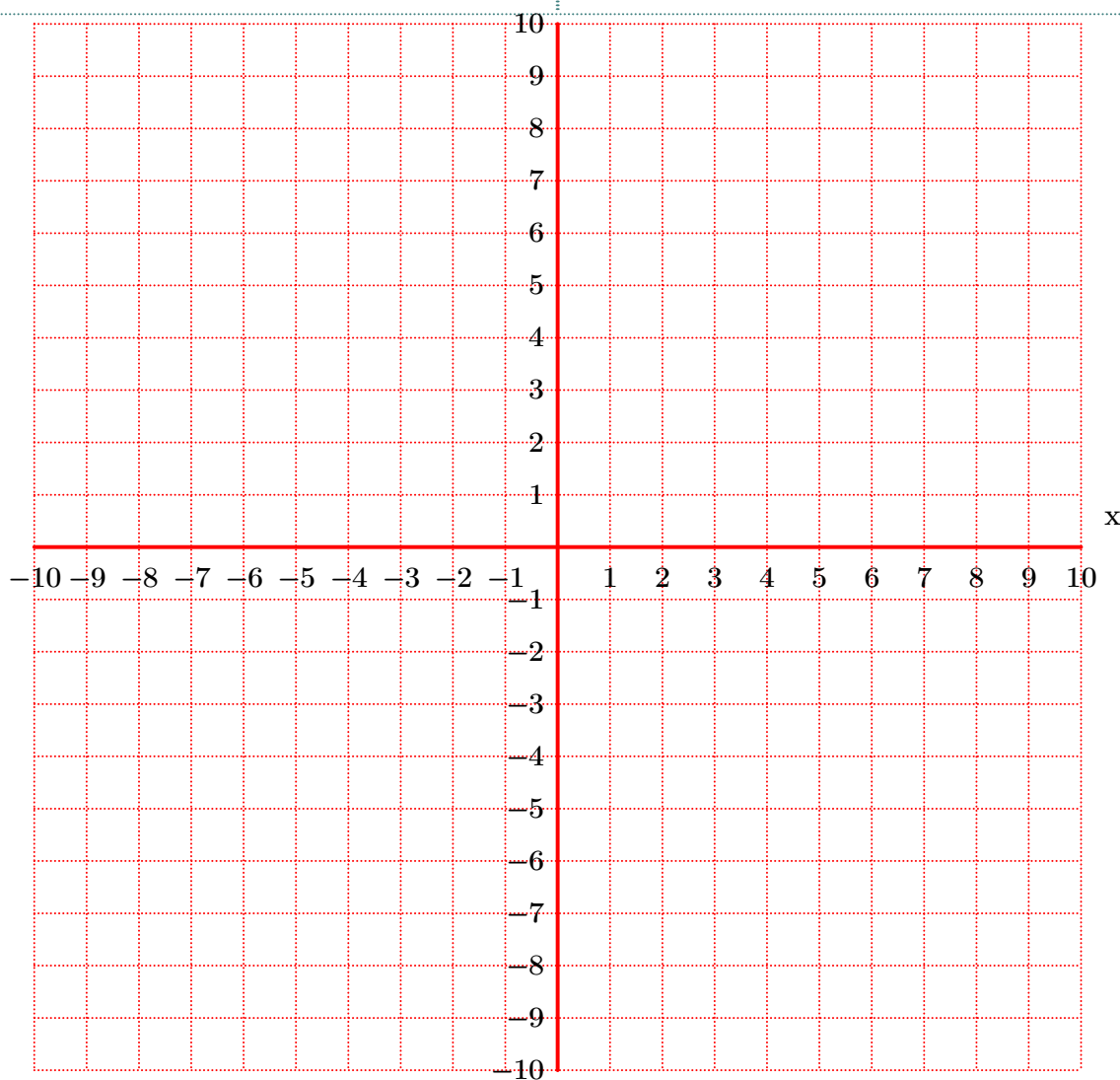
Graph: $y = -4x - 3$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

19

Big Idea: $y = \frac{\text{rise}}{\text{run}} x + y \text{ intercept}$

Given: $y = 2x + 1$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}} x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

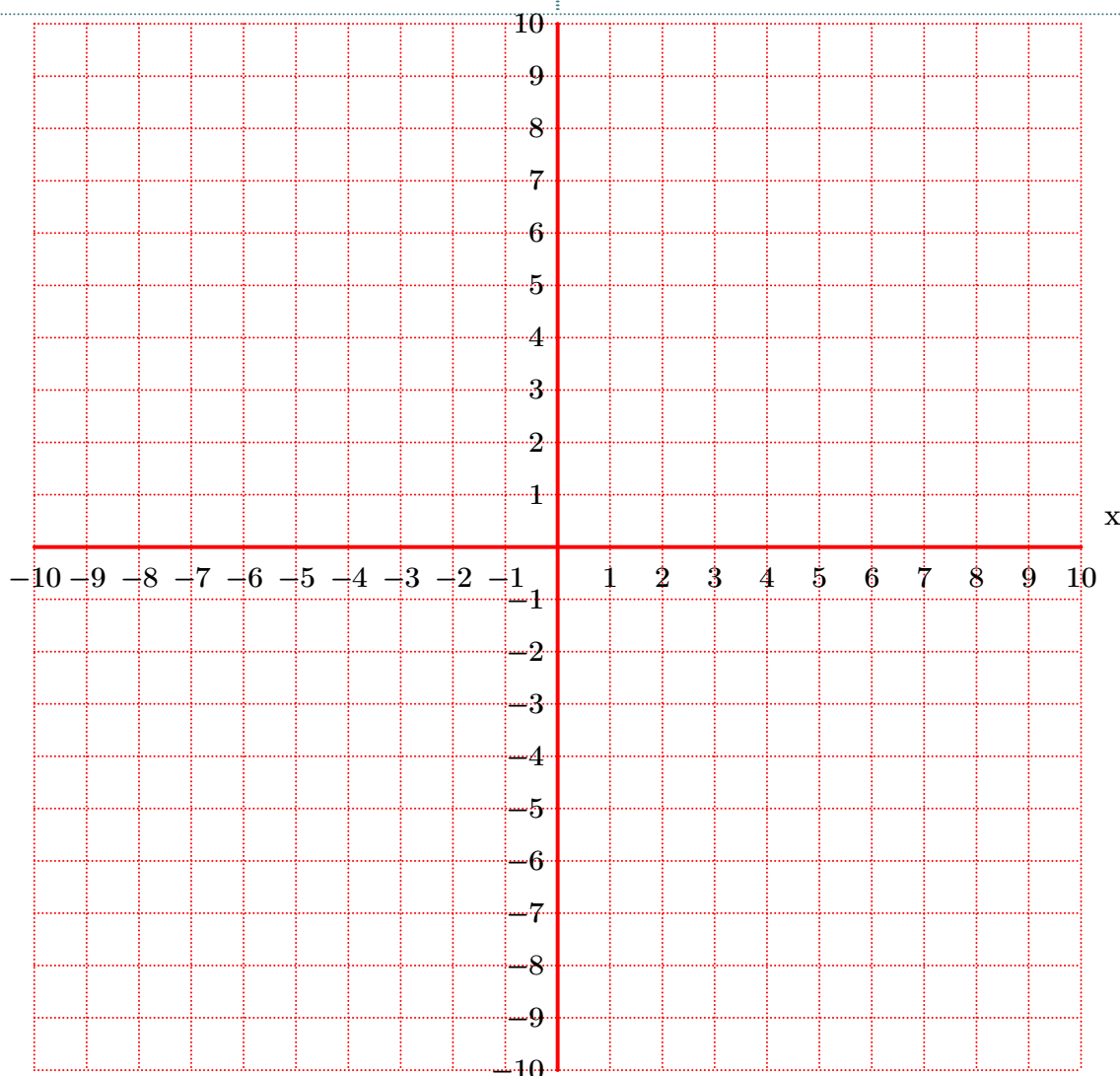
Graph: $y = 2x + 1$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.



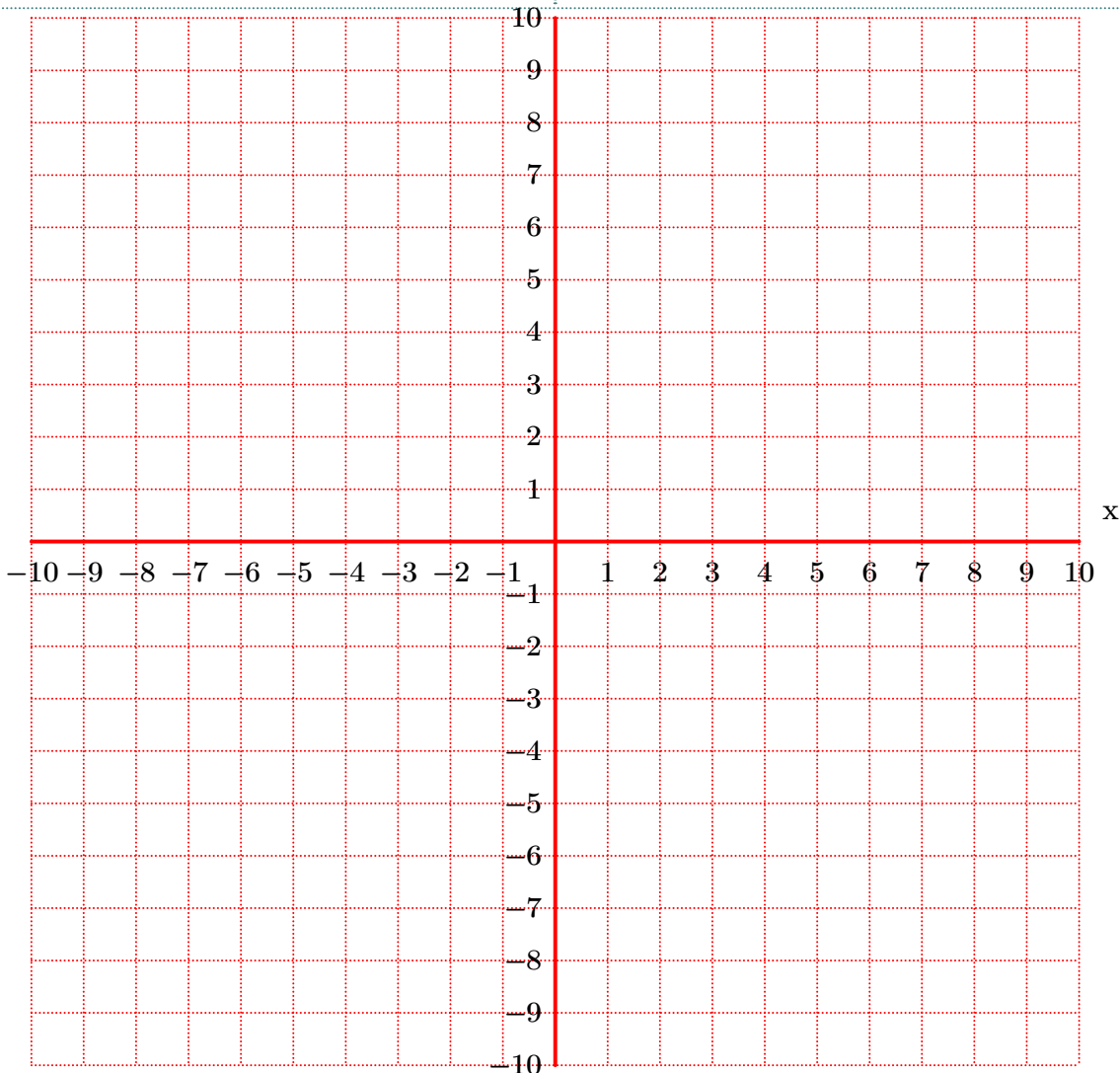
Big Idea: $y = \frac{\text{rise}}{\text{run}}x + y \text{ intercept}$

Given: $y = 2x - 4$

1. Rewrite to show slope as a fraction: $y = \frac{}{}x + $
2. Identify the rise: $$
3. Identify the run: $$
4. Identify the slope: $\frac{}{}$
5. Identify the y-intercept: $$
6. Interpret: Every time x changes by $$, the value of y changes by $$.

Graph: $y = 2x - 4$

1. Mark the point where the line crosses the y axis.
That point is $(0,)$
2. Mark the run. This means draw a horizontal line segment $$ unit long from the y intercept.
3. Draw the rise. This means draw a vertical line segment that is $$ units long starting from the end of the run.
4. Complete the graph by connecting with a line with arrows on both ends.



Name:

Date:

Period:

21

Big Idea: $y = \frac{\text{rise}}{\text{run}} x + y \text{ intercept}$

Given: $y = 5x + 2$

1. Rewrite to show slope as a fraction: $y = \frac{\boxed{}}{\boxed{}} x + \boxed{}$

2. Identify the rise:

3. Identify the run:

4. Identify the slope: $\frac{\boxed{}}{\boxed{}}$

5. Identify the y-intercept: $\boxed{}$

6. Interpret: Every time x changes by $\underline{\hspace{1cm}}$, the value of y changes by $\underline{\hspace{1cm}}$.

Graph: $y = 5x + 2$

1. Mark the point where the line crosses the y axis.
That point is $(0, \boxed{})$

2. Mark the run. This means draw a horizontal line segment $\boxed{}$ unit long from the y intercept.

3. Draw the rise. This means draw a vertical line segment that is $\boxed{}$ units long starting from the end of the run.

4. Complete the graph by connecting with a line with arrows on both ends.

