

# Stained Glass



# Window



# Stained Glass Window

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## Linear Equation Worksheet

Circle three linear equations in each box and write them over the t-tables below. Complete each table with at least three ordered pairs (with coordinates of 10 or less) that are solutions to the linear equation. Then graph these twelve linear equations on the coordinate plane provided. Write the equation neatly on each line that you graph. When you are done graphing the equations use markers to color each section and create your stained glass window.

|   |   |  |   |
|---|---|--|---|
| $x = -8$<br>$x = -5$<br>$x = -1$<br>$x = 2$<br>$x = 7$<br>$x = 9$ | $y = -9$<br>$y = -5$<br>$y = -2$<br>$y = 1$<br>$y = 6$<br>$y = 8$ | $y = x + 5$<br>$y = 2x - 7$<br>$y = 4x + 8$<br>$y = 2x + 18$<br>$y = \frac{1}{4}x - 6$<br>$y = \frac{1}{2}x - 3$ | $y = -x - 9$<br>$y = -2x + 8$<br>$y = -\frac{1}{3}x - 3$<br>$y = -\frac{1}{4}x + 5$<br>$y = -2x$<br>$y = -x + 12$ |
|---|---|--|---|

x = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

x = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

x = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

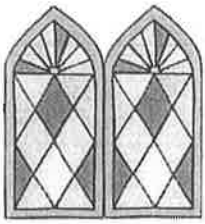
y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |

y = \_\_\_\_\_

| x | y |
|---|---|
|   |   |
|   |   |
|   |   |





# Stained Glass Window

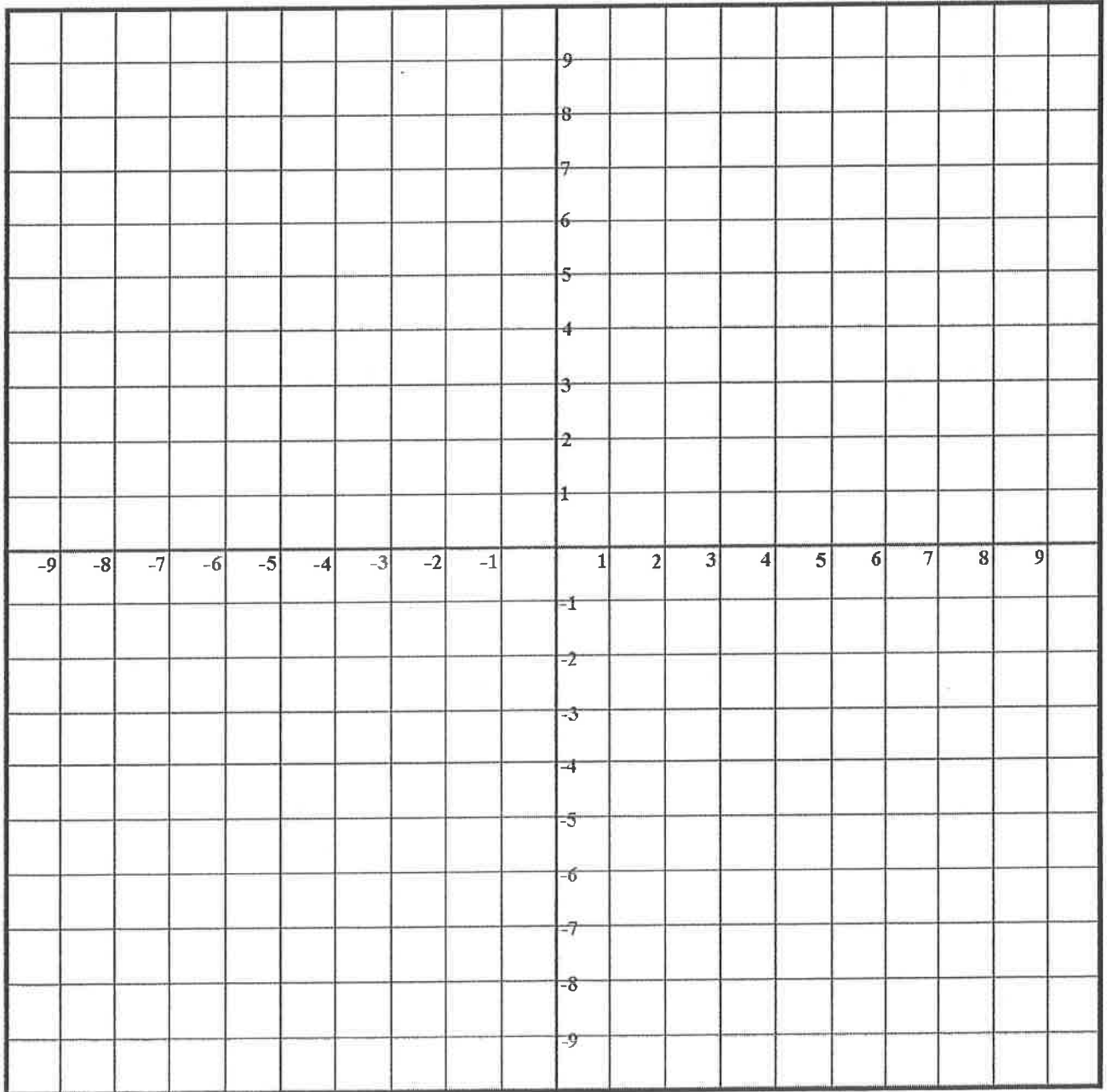
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## Stained Glass Window Project

On the coordinate plane below, graph the linear equations that you circled on the Linear Equations Worksheet. Use the three ordered pair solutions that you listed for each equation to graph it. Write the equation neatly on each line that you graph. When you are finished graphing the equations, use markers to color each section to create your stained glass window.



# Graphing Linear Equations

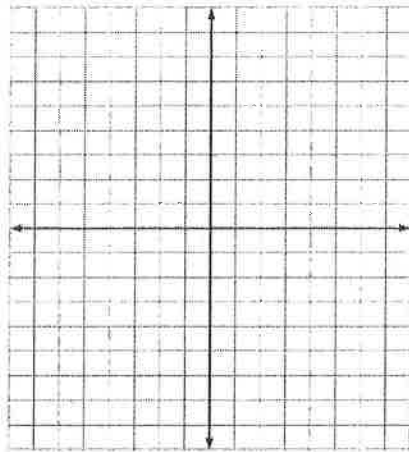
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Complete the function table and graph the line for each equation.

(1)

$$y = -2x - 1$$

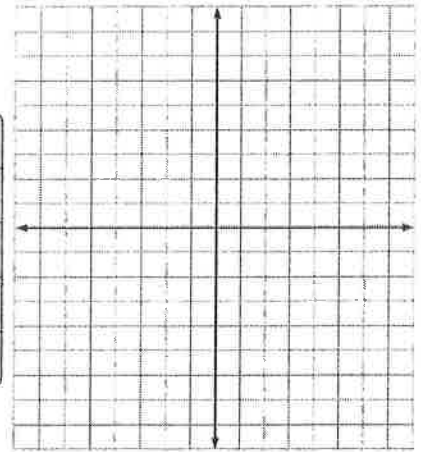
| x  | y |
|----|---|
| -3 |   |
| -2 |   |
| 1  |   |
| 2  |   |



(4)

$$y = 2x + 5$$

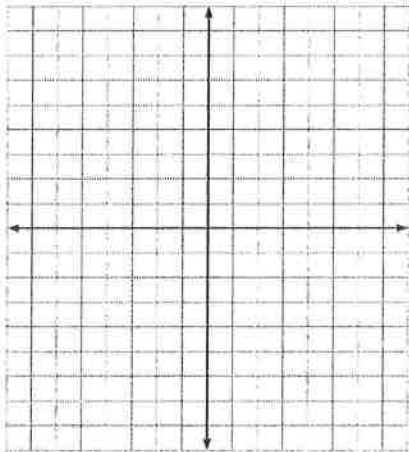
| x             | y |
|---------------|---|
| -5            |   |
| -1            |   |
| $\frac{1}{2}$ |   |
| 1             |   |



(2)

$$y = 3x + 4$$

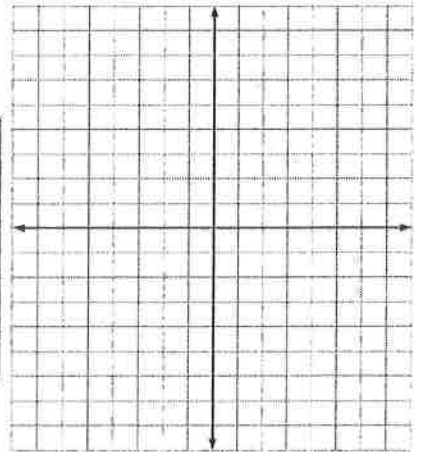
| x  | y |
|----|---|
| -2 |   |
| -1 |   |
| 0  |   |
| 1  |   |



(5)

$$y = 4x + 2$$

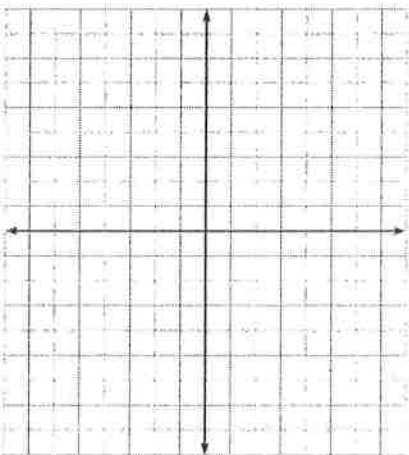
| x             | y |
|---------------|---|
| -1            |   |
| $\frac{1}{2}$ |   |
| $\frac{1}{2}$ |   |
| 1             |   |



(3)

$$y = -x + 4$$

| x  | y |
|----|---|
| -3 |   |
| 1  |   |
| 5  |   |
| 6  |   |



(6)

$$y = -2x - 3$$

| x  | y |
|----|---|
| -5 |   |
| -3 |   |
| -2 |   |
| 2  |   |

