

5-4-18

Aim: SWBAT draw the graphic representation of a pattern from an equation using a table of data.

HW: T-chart and graph

1. $y = 2x + 1$

3. $y = \frac{1}{2}x + 3$

Quiz ???

2. $y = -2x + 1$

4. $y = \frac{1}{2}x - 3$

Do Now: Check picture

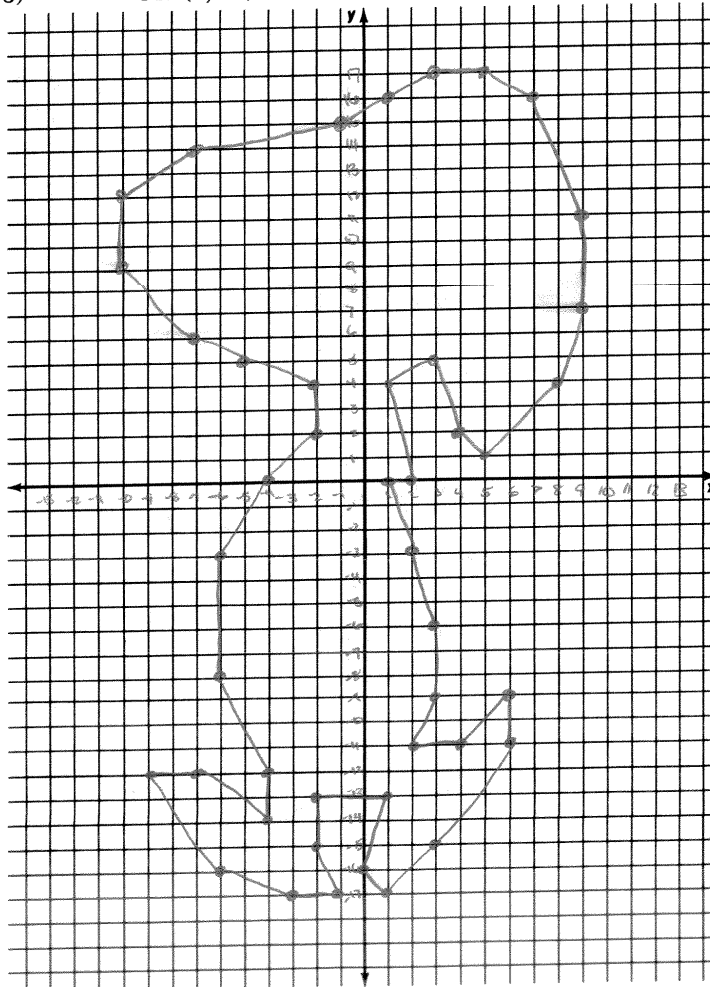
Name _____

Extra Practice
(Lessons 8-3 and 8-4)

Ordered Pairs, The Coordinate System

Graph each of the points below. Connect the points as you go along.

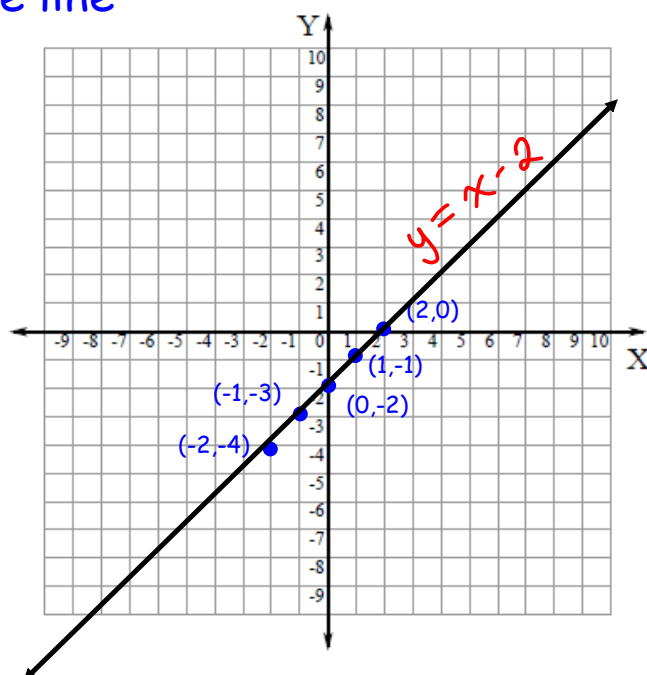
- | | | | | |
|---------------|-------------|-------------|---------------|--------------|
| 1. (-2, 2) | 23. (3, -6) | 29. (4, 2) | 35. (5, 17) | 41. (-10, 9) |
| 2. (-4, 0) | 24. (2, -3) | 30. (5, 1) | 36. (3, 17) | 42. (-7, 6) |
| 3. (-6, -3) | 25. (1, 0) | 31. (8, 4) | 37. (1, 16) | 43. (-5, 5) |
| 4. (-6, -8) | 26. (0, 2) | 32. (9, 7) | 38. (-1, 15) | 44. (-2, 4) |
| 5. (-4, -12) | 27. (1, 4) | 33. (9, 11) | 39. (-7, 14) | 45. (-2, 2) |
| 6. (-4, -14) | 28. (3, 5) | 34. (7, 16) | 40. (-10, 12) | |
| 7. (-7, -12) | | | | |
| 8. (-9, -12) | | | | |
| 9. (-6, -16) | | | | |
| 10. (-3, -17) | | | | |
| 11. (-1, -17) | | | | |
| 12. (-2, -15) | | | | |
| 13. (-2, -13) | | | | |
| 14. (1, -13) | | | | |
| 15. (0, -16) | | | | |
| 16. (1, -17) | | | | |
| 17. (3, -15) | | | | |
| 18. (6, -11) | | | | |
| 19. (6, -9) | | | | |
| 20. (4, -11) | | | | |
| 21. (2, -11) | | | | |
| 22. (3, -9) | | | | |



Make a t-chart and graph the line

$$y = x - 2$$

x	x - 2	y	(x, y)
-2	-2 - 2	-4	(-2, -4)
-1	-1 - 2	-3	(-1, -3)
0	0 - 2	-2	(0, -2)
1	1 - 2	-1	(1, -1)
2	2 - 2	0	(2, 0)

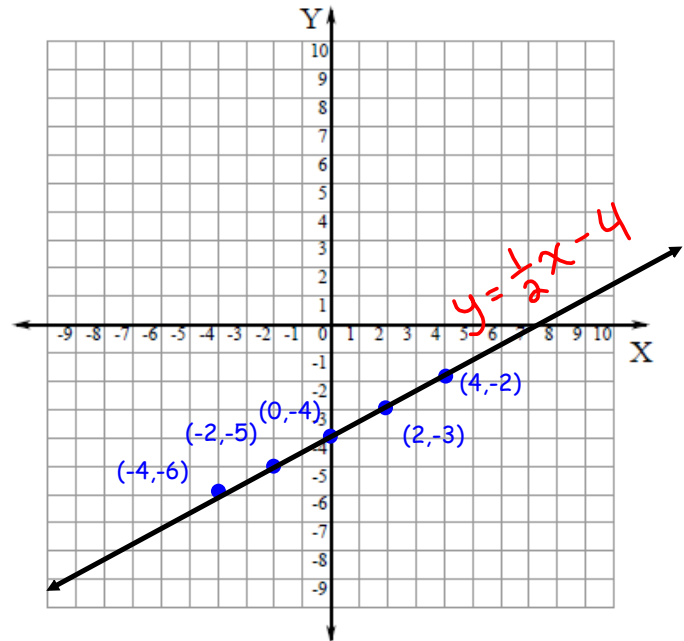


Make a t-chart and graph the line

$$y = \frac{1}{2}x - 4$$

$$y = \frac{1}{2}x - 4 \quad y = \frac{x}{2} - 4$$

x	$\frac{1}{2}x - 4$	y	(x, y)
-4	$(\frac{1}{2})(-4) - 4$	-6	(-4, -6)
-2	$(\frac{1}{2})(-2) - 4$	-5	(-2, -5)
0	$(\frac{1}{2})(0) - 4$	-4	(0, -4)
2	$(\frac{1}{2})(2) - 4$	-3	(2, -3)
4	$(\frac{1}{2})(4) - 4$	-2	(4, -2)



$$\begin{matrix} x & y \\ (-4, -6) \end{matrix}$$

$$y = \frac{1}{2}x - 4$$

$$-6 \stackrel{?}{=} \frac{1}{2}(-4) - 4$$

$$-6 \stackrel{?}{=} -2 - 4$$

$$-6 = -6$$

$(-4, -6)$ is a solution to $y = \frac{1}{2}x - 4$. It's part of the solution set.

$$\begin{matrix} x & y \\ (0, 0) \end{matrix}$$

$$y = \frac{1}{2}x - 4$$

$$0 \stackrel{?}{=} \frac{1}{2}(0) - 4$$

$$0 = 0 - 4$$

$$0 \neq -4$$

Since $(0, 0)$ does not satisfy the equation $y = \frac{1}{2}x - 4$, it is not part of the solution set.

Make a t-chart and graph the line

$$y = -\frac{1}{2}x - 4$$

x	$-\frac{1}{2}x - 4$	y	(x, y)
-4	$-\frac{1}{2}(-4) - 4$	-2	(-4, -2)
-2	$-\frac{1}{2}(-2) - 4$	-3	(-2, -3)
0	$-\frac{1}{2}(0) - 4$	-4	(0, -4)
2	$-\frac{1}{2}(2) - 4$	-5	(2, -5)
4	$-\frac{1}{2}(4) - 4$	-6	(4, -6)

