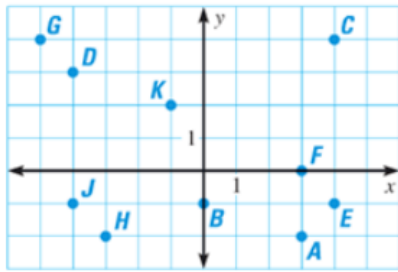


5.1 Plots on the Coordinate Plane

PRACTICE

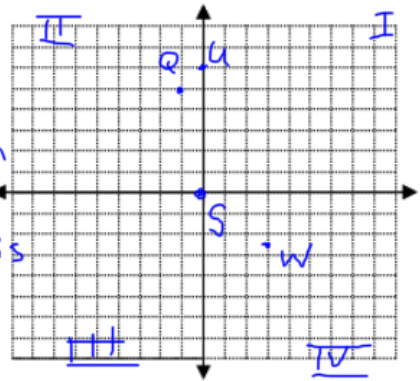
For 1-6, state the coordinates of the point.

1. A (3, -2)
2. C (4, 4)
3. E (4, -1)
4. G (-5, 4)
5. J (-4, -1)



For 6-9, plot the points in a coordinate plane. Describe the location of the point (what quadrant?)

6. Q (-1, 5) II
7. S (0, 0) origin
8. U (0, 6) y-axis
9. W (3, -2.5) IV



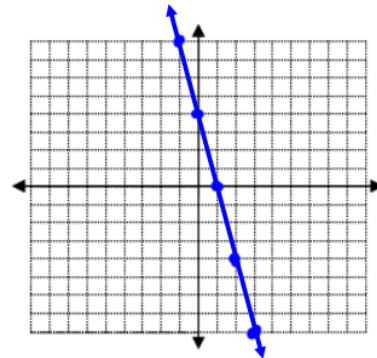
10. Use the verbal statement below to complete the table, equation, and graph!

VERBAL: Bob has one dollar. Each week he makes 2 dollars for an allowance.

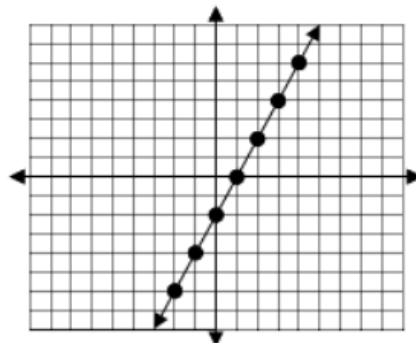
TABLE	EQUATION	GRAPH												
<table border="1" style="margin: auto;"> <thead> <tr> <th style="color: blue;">TIME</th> <th style="color: blue;">MONEY</th> </tr> <tr> <th style="color: blue;">(weeks)</th> <th style="color: blue;">(dollars)</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">0</td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: center;">1</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">5</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">7</td></tr> </tbody> </table>	TIME	MONEY	(weeks)	(dollars)	0	1	1	3	2	5	3	7	<p>Write the rule.</p> <p>$y = 1 + 2x$ or $y = 2x + 1$</p> <p>Initial Value = 1</p> <p>Rate of Change = 2</p>	
TIME	MONEY													
(weeks)	(dollars)													
0	1													
1	3													
2	5													
3	7													

11. Given the table. Graph the line.

x	y
-1	8
0	4
1	0
2	-4
3	-8



12. Given the graph. Fill in the table.



x	y
-2	-6
-1	-4
0	-2
1	0
2	2
3	4

13. Given the equation. Fill in the table.

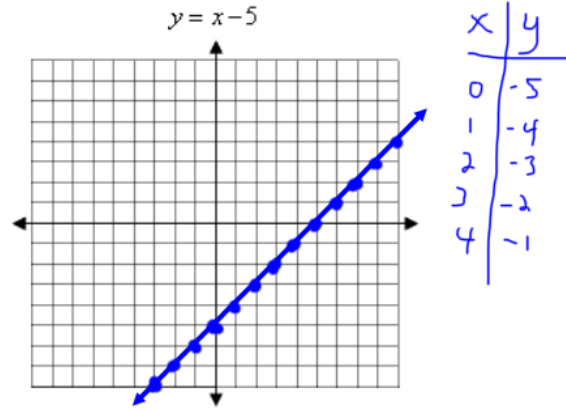
$y = -3x + 6$

x	y
-2	12
-1	9
0	6
1	3
2	0
3	-3
20	-54

$\rightarrow y = -3(-2) + 6 = 12$

$\rightarrow y = -3(20) + 6 = -54$

14. Given the equation. Make the graph.
(HINT: Make a table if you need it!)



CHECKING SOLUTIONS Tell whether the ordered pair is a solution of the equation

<p>15. $2y + x = 4$ $(-2, 3)$</p> <p>$2(3) + (-2) = 4$</p> <p>$6 - 2 = 4$</p> <p>$4 = 4$</p> <p>YES!</p>	<p>16. $x = 9$ $(9, 6)$</p> <p>$9 = 9$</p> <p>YES!</p>	<p>17. $7x - 4y = 1$ $(-3, -5)$</p> <p>$7(-3) - 4(-5) = 1$</p> <p>$-21 + 20 = 1$</p> <p>$-1 = 1$</p> <p>NO!</p>
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18. **ERROR ANALYSIS** Describe and correct the error in determining whether $(8, 11)$ is a solution of $y - x = -3$

(x, y)

They put 8 in for y when really it is x
They put 11 in for x when really it is y

$y - x = -3$ $11 - 8 = -3$

$8 - 11 = -3$ $3 = -3$ ~~NO!~~

$-3 = -3$ $(8, 11)$ is a solution.

19. **MULTIPLE CHOICE** Which ordered pair is a solution of $6x + 3y = 18$?

A. $(-2, -10)$ $6(-2) + 3(-10) = 18$

$-12 - 30 = 18$

$-42 = 18$

NO

B. $(-2, 10)$ $6(-2) + 3(10) = 18$

$-12 + 30 = 18$

$18 = 18$

YES!

C. $(2, 10)$ $6(2) + 3(10) = 18$

$12 + 30 = 18$

$42 = 18$

NO

D. $(10, -2)$ $6(10) + 3(-2) = 18$

$60 - 6 = 18$

$54 = 18$

NO

SKILLZ REVIEW

<p>GRAPH</p> <p>1. Describe how to move from point A to point B.</p> <p>5 units in the y direction (rise)</p> <p>3 units in the x direction (run)</p> <p>2. Describe how to move from point C(0,3) to point D(2,-3).</p>	<p>SIMPLIFY</p> <p>3. $4(x - 3) + 5$</p> <p>$4x - 12 + 5$</p> <p>$4x - 7$</p> <p>4. $8x - 3(x - 3)$</p>	<p>SOLVE</p> <p>5. $7 - 4x = 17$</p> <p>-2 -2</p> <p>$-4x = 10$</p> <p>$\frac{-4x}{-4} = \frac{10}{-4}$</p> <p>$x = \frac{-10}{4} = \frac{-5}{2}$</p> <p>6. $3x + 5 = 10x + 6$</p>
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For extra help, check the Skillz Review video!