### 5.1 Plot Points on Coordinate Plane

Write your questions here!


Cartesian Plane


## Points on a Line



VERBAL: Sarah has 2 baseball cards. Each day she collects 3 more cards.

|  |  | EQUATION | GRAPH |
| :---: | :---: | :---: | :---: |
|  |  | $y=$ |  |
| LABEL | LABEL |  |  |
| (unit) | (unit) |  | $\cdots \times$ |
| 0 |  |  | $\square \square$ |
| 1 |  | Initial Value $=$ |  |
| 2 |  | Rate of Change $=$ | $\cdots$ |
| 3 |  |  | $\square \square \square$ |
|  |  |  | $\downarrow$ v |

Is the point $(5,8)$ a solution to

| $x$ | $y$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |



Fill in the table!


| $x$ | $y$ |
| :---: | :---: |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

## Summarize your notes:

Now,
summarize $\square$
your notes $\square$
here!

### 5.1 Plots on the Coordinate Plane

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

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

For 6-9, plot the points in a coordinate plane.
Describe the location of the point (what quadrant?)
6. $Q(-1,5)$
7. $S(0,0)$
8. $U(0,6)$
9. $W(3,-2.5)$

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 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| LABEL | LABEL | Write the rule. | $\square \rightarrow$ |
| (weeks) | (units) |  | $\square$ |
| 0 |  | $y=$ | - |
| 1 |  |  | - |
| 2 |  |  |  |
|  |  | Initial Value = |  |
| 3 |  |  | $\square \square$ |
|  |  | Rate of Change = |  |

11. Given the table. Graph the line.

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| -1 | 8 |
| 0 | 4 |
| 1 | 0 |
| 2 | -4 |
| 3 | -8 |


12. Given the graph. Fill in the table.


| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

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

| $y=-3 x+6$ |  |
| :---: | :---: |
| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 20 |  |



CHECKING SOLUTIONS Tell whether the ordered pair is a solution of the equation
15. $2 y+x=4$
$(-2,3)$
16. $x=9$
$(9,6)$
17. $7 x-4 y=1 \quad(-3,-5)$
18. ERROR ANALYSIS Describe and correct the error in determining whether $(8,11)$ is a solution of $y-x=-3$

$$
\begin{aligned}
y-x & =-3 \\
8-11 & =-3 \\
-3 & =-3 \quad(8,11) \text { is a solution. }
\end{aligned}
$$

19. MULTIPLE CHOICE Which ordered pair is a solution of $6 x+3 y=18$ ?
A. $(-2,-10)$
B. $(-2,10)$
C. $(2,10)$
D. $(10,-2)$

## SKILLZ REVIEW

## GRAPH

1. Describe how to move from point A to point B.
$\qquad$ units in the $y$ direction (rise)
$\qquad$ units in the $x$ direction (run)

2. Describe how to move from point $C(0,3)$ to point $D(2,-3)$.

## SIMPLIFY

SOLVE
5. $7-4 x=17$
3. $4(x-3)+5$
4. $8 x-3(x-3)$

1. Use the graph to fill in the table.


| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

2. Is $\left(\frac{5}{2},-6\right)$ a solution to $y=4 x-4$ ? Show work!

Hewey, Dewey, and Lewey are saving money for the new iPad. Help them keep track of their budget by filling in the blanks!


