## Chapter 4, Practice Quiz 1

Lessons 4.1, 4.2, and 4.3

## Skills Assessed:

I can plot points in a coordinate plane.
I can draw a scatter plot and make predictions.
I can graph a linear equation using a table.

Name: $\qquad$

Date: $\qquad$ Hour: $\qquad$

I can graph horizontal and vertical lines.
I can find the intercepts of a graph of a linear equation. I can use intercepts to sketch a graph of an equation.

1) Write the ordered pairs for the points labeled $A, B, C$, and $D$

2) Plot and label the ordered pairs: $S(1,4), U(0,2), N(2,-5)$.
3) The 1996 population, $P$ (in millions), for seven states is shown in the table below. The number of U.S. representatives, $R$, for each state is given. Make a scatter plot of the data, with population on the horizontal axis.

| State | AK | OR | MN | NC | MI | IL | FL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population, $P$ <br> (in millions) | 0.6 | 3.2 | 4.7 | 7.3 | 9.6 | 11.8 | 14.4 |
| Number of U.S. <br> representatives, $\boldsymbol{R}$ | 1 | 5 | 8 | 12 | 16 | 20 | 23 |

4) Describe the relationship between the population and the number of U.S. representatives in question 3.
5) 

$A=$ $\qquad$
$B=$ $\qquad$
$C=$ $\qquad$
$D=$ $\qquad$
2)

3)

4)
5) Check if the point is a solution to the equation. Show your work.

Answer "yes" or "no."

$$
4 y-6 x=0 \quad(-3,-2)
$$

6) Re-write the equation in function form. Show your work

$$
-7 x+2 y=4
$$

7) Create a table of values to graph the equation $y=1-2 x$.
8) You earn $\$ 12$ an hour mowing lawns and $\$ 8$ an hour washing windows. You want to make $\$ 600$ in one week. An algebraic model for your earnings is $12 x+8 y=600$, where $x$ is the number of hours you mow lawns and $y$ is the number of hours you wash windows. If you spent 15 hours washing windows, how many hours did you have to mow lawns to make $\$ 600$ in one week? Show your work.
9) $\qquad$
10) $\qquad$
11) 


8) $\qquad$
9) $x$-intercept $\qquad$
$y$-intercept $\qquad$
10) Graph the line that has the given intercepts:
$x$-intercept: 4
$y$-intercept: -1
11) Find the $x$ - and $y$-intercepts of the graph of the equation. Show your work. Then graph the equation.

$$
y=3-x
$$

11) 


12) Equation: $\qquad$
12) You sold tickets to the school play. Advance tickets were $\$ 5.00$ and tickets bought at the door were $\$ 6.00$. Total ticket sales were $\$ 570$. Let $x$ represent the number of advance tickets and $y$ represent the number of door tickets. Write an equation to represent the number of tickets sold. Sketch a graph of the equation.


