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## Unit 5 Practice Questions

1. Add $-k$ to the number line.

2. What does the question mark represent?

3. Amy's bank account balance is less than -2. Which statement could be true about Amy's bank account?
a. Amy owes less than $\$ 2$.
c. The bank owes Amy less than $\$ 2$.
b. Amy owes more than \$2.
d. the bank owes Amy more than $\$ 2$.

Why? $\qquad$
$\qquad$
4. Plot $-\mathbf{-} \frac{\mathbf{1}}{\mathbf{3}}$ and $\quad \frac{\mathbf{3}}{\mathbf{4}}$ on the number line.

5. Fill in the inequalities ( $>,<,=$ )

$-2 \bigcirc-3$
6. Which point would be located at $(-2,-1)$ ?

7. Adam has $\$ 12$ in his bank accounts. If he spends $\$ 16$, what integer would represent how much money is left in his account?
8. Order the expressions from least to greatest: $\quad-12,|-14|,-21,|-16|$
9. One day in January, scientists measured the temperature of four different cities. The following table shows their results.

| City | Temperature |
| :---: | :---: |
| Bismark, North Dakota | -6 |
| Duluth, Minnesota | -13 |
| Fairbanks, Alaska | 0 |
| Laramie, Wyoming | -4 |

Which city was the warmest?
Which city was the coldest?
10. Describe the location of -6 compared to -9 on a number line.

Describe the location of -12 compared to -7 on a number line.
11. A dolphin was swimming at a depth of 43 meters. She swam straight up 17 meters, then swam straight back down 12 meters. Use an integer to show the dolphin's current location, in meters, compared to the surface of the water.
12. The average temperature in Anchorage, Alaska, in January is -16 degrees Celsius. The average low temperature for Montreal, Canada, in January is 3 degrees colder. What is the average low temperature in Montreal in January?
13. Which point could represent $(-3,-5)$ on a number line?

14. What is the distance between Sarah's and Jaden's house?

15. Name a point that could lie within each quadrant.

I -

II -

III -

IV -

16. The coordinate grid to the right shows the position of the library.

Emy's house is at ( $-2,-2$ ). Vince lives 3 blocks east and two blocks north. Plot the points for their two houses.

What is the distance between Vince's house and the library? Remember, you have to stay on the roads.

17. Reflect rectangle $A B C D$ over the $x$-axis.

18. A seagull is flying 110 feet above sea level. Directly below the seagull, a pelican is floating on the surface of the water. Directly below the pelican, a fish is swimming 150 feet below sea level.
19. Graph rectangle JKLM on the coordinate plane with the vertices:

$$
(4,-3),(-1,-3),(-1,1), \text { and }(4,1)
$$

What is the area of Rectangle JKLM?


