## USATESTA

Your Classroom Partner

## milestones \#2

Student Name: $\qquad$

Date: $\qquad$
Score: $\qquad$

1) The area of a city is commonly measured in
A) square feet.
B) square miles.
C) square inches.
D) cubic centimeters.
2) 

## Distance vs. Tardiness



Which equation is the BEST fit for the data in the graph?
A) $y=x+2$
B) $y=2 x+1$
C) $y=x-\frac{1}{2}$
D) $y=\frac{1}{2} x-1$


Which equation represents the perpendicular bisector of the given line segment?
A) $x=0$
B) $y=0$
C) $y=x$
D) $x=10$
4)

$$
\begin{array}{|c|c|c|c|c|c|}
\hline \mathbf{x} & 1 & 2 & 3 & 4 & 5 \\
\hline \mathbf{y} & 4 & 8 & 12 & 16 & 20 \\
\hline
\end{array}
$$

Given the table, write an expression for the function, and describe what it does.
A) $y=2 x . y$ is double $x$.
B) $y=3 x . y$ is triple $x$.
C) $y=4 x$. $y$ is 4 times $x$.
D) $\mathrm{y}=2 \mathrm{x}+1$. y is twice x plus 1 .
5)


If two equations are graphed, how can you find the solution to the system of equations?
A) Find the slope of point lines.
B) Find where the lines intersect.
C) Find where the slope is positive.
D) Find where both lines cross the $x$-axis.
6) How many terms are in the expression?

$$
2 x+4 y-3
$$

A) -3
B) 2
C) 3
D) 4
7)


Which of the inequalities is represented by the graph?
A) $y<x+2$
B) $y<-x+2$
C) $y \leq-x+2$
D) $y \geq 2 x-1$
8)


Describe the transformation.
A) reflection across the $y$-axis
B) reflection across the $x$-axis
C) translation 4 units to the right
D) reflection across the line $y=x$
9) The price of bread went from $\$ 1.50$ per loaf to $\$ 2.50$ per loaf in four years. Find the rate of change of the price of bread.
A) $\quad \$ 0.15$ per year
B) $\$ 0.25$ per year
C) $\$ 0.55$ per year
D) $\$ 1.00$ per year
10)





Identify the graph of an even function.
A)
B)
C)
D)
11) Find the center of the circle $(x-3)^{2}+(y+3)^{2}=36$.
A) $(3,3)$
B) $(3,-3)$
C) $(-3,3)$
D) $(-3,-3)$
12) What is the solution to the system of equations?
$6 x-9 y=16$
$2 x-3 y=7$
A) $(5,1)$
B) $(2,-1)$
C) $\left(3, \frac{2}{9}\right)$
D) no solution
13) Hailey has a summer job at the water slide park. She earns $\$ 9.50$ an hour as a lifeguard, but never works more than 25 hours in a week. She determines that her salary is modeled by the function $s=9.5 \mathrm{~h}$.

What is the domain of this function in this situation?
A) $s \leq 237.50$
B) all real numbers
C) $\{0 \leq h \leq 25\}$
D) $\quad\{0 \geq h \geq 25\}$
14)
A.

B.

C.

D.


Several polynomial functions are graphed. Which graph displays a polynomial function with all even exponents?
A)
B)
C)
D)
15)


Jason is trying to prove that this quadrilateral is a rhombus. Using the slope formula, he finds that opposite sides of the polygon are parallel. Since all of the sides appear to be congruent, Jason concludes that ABCD is a rhombus. Is Jason's reasoning correct? Why or why not?
A) correct; Jason can tell by looking at the graph that all sides are congruent.
B) correct; A rhombus has two pairs of parallel sides which may or may not be congruent.
C) incorrect; Jason must also prove that all sides are congruent by using the distance formula.
D) incorrect; A rhombus does not have two pairs of parallel sides. Jason must prove that all sides are congruent.
16)

$$
1,1,2,3,5,6,7,8,8,8,9,14
$$

The students in Tina's class are selling tickets to a car wash to raise money for a local animals shelter. The number of tickets by twelve students is shown here. What is the mode of these numbers?
A) 6
B) 6.5
C) 7.5
D) 8

