$\qquad$

## MAKE UP WORK

1. What is the average rate of change for the function $f(x)=3 x^{2}-5$ on the interval $-3<x<-1$ ?
a.) 5
b.) -12
c.) - 7
d.) 8
2. A program to restore an endangered frog species began 8 months ago. The table shows the population of the species at various times since the program began.

| MONTH | NUMBER OF FROGS |
| :---: | :---: |
| 0 | 12 |
| 2 | 65 |
| 4 | 190 |
| 6 | 545 |
| 8 | 1230 |

On average, what has been the monthly change in the frog population over the last 2 months?
a. 260
b. 340.5
c. 45
d. 342.5
3. Find the domain of the following expression:

$$
F(x)=\frac{6-2 X}{4 X+3}
$$

a. The domain of the function includes all real numbers.
b. The domain of the function includes all whole numbers where $x \geq 7 / 5$.
c. The domain of the function includes all real numbers where $x \neq-3 / 4$.
d. The domain of the domain includes all numbers where $x=3 / 5$.
4. A cricket match charges customers an initial fee of $\$ 18$ to enter the gallery. Show time cost an additional $\$ 12$ per hour. Which function represents the total cost in dollars, of watching it as a function having a show time in $t$ hours?
a. $\quad c(d)=18 t+12 d$
b. $\quad c(d)=12+18(t-1)$
c. $c(d)=18+12 t$
d. $\quad c(d)=8 d+18(t-1)$
5. 5. Sam has a mobile that automatically take pictures. His mobile takes 10 pictures on Day 1 and 6 pictures every day after that .Which function models the total number of pictures $p(d)$ the camera has taken after $d$ days?
a. $p(d)=10(d-1)+6$
b. $\quad p(d)=10+6(d-1)$
c. $p(d)=6+10(d-1)$
d. $p(d)=10 d+6 d$
6. Compare the graph and the equation given below:
$G(x)$


$$
F(x)=3 X^{2}+4 X-10
$$

| NO. | STATEMENT | TRUE (T) | FALSE(F) |
| :--- | :--- | :--- | :--- |
| 1. | The graph of $\mathrm{F}(\mathrm{x}) \& \mathrm{G}(\mathrm{x})$ should open down. |  |  |
| 2. | The Y- intercept of $\mathrm{F}(\mathrm{x})$ is greater than Y-intercept of $\mathrm{G}(\mathrm{x})$. |  |  |
| 3. | The graph has 1 X-intercept. |  |  |

a. $\quad 1(\mathrm{~T}), 2(\mathrm{~F}), 3(\mathrm{~T})$.
b. $1(\mathrm{~F}), 2(\mathrm{~T}), 3(\mathrm{~T})$.
c. $1(\mathrm{~T}), 2(\mathrm{~F}), 3(\mathrm{~F})$.
d. $1(\mathrm{~F}), 2(\mathrm{~F}), 3(\mathrm{~F})$.
7. The function $g(x)$ can be represented as $g(x)=-X^{2}-6 X-2$.

Some of the values of the quadratic function $\mathrm{h}(\mathrm{x})$ are shown in the table.

| X | $\mathrm{h}(\mathrm{x})$ |
| :--- | :--- |
| -2 | -8 |
| -1 | -2 |
| 0 | 2 |
| 1 | 4 |
| 2 | 4 |

Which statement is a true comparison of the properties of $g(x)$ and $h(x)$ ?
a. The function $g(x)$ has a greater $Y$ - intercept than the function $h(x)$.
b. The function $h(x)$ has a greater $Y$ - intercept than the function $g(x)$.
c. The graph of the function $g(x)$ has a negative 'a value and it should open up.
d. The function $\mathrm{h}(\mathrm{x})$ has X - intercept at $\mathrm{Y}=4$.
$\qquad$
8. What is the solution to $-3(9 r+3)-8 r \geq-16 r-(10 r-9)$.
a. $r \leq-5$
b. $r \geq-5$
c. $r \leq-2$
d. $r \geq 1$
9. What is the solution of $-6 x-15=-6 x+5(-4-x)$ ?
a. $x=-4$
b. $x=-1$
c. Infinite solutions
d. No solution
10. 10. Which numerical expression would provide you the solution to the equation

$$
2 X^{2}+5 X-4 ?
$$

a. $\frac{-8 \pm \sqrt{57}}{4}$
b. $\frac{-5 \pm \sqrt{57}}{4}$
c. $\frac{-4 \pm \sqrt{47}}{6}$
d. $\frac{-2 \pm \sqrt{57}}{4}$
11. Given $F(x)=X 2+6$ and $G(x)=2 X+6$ which value of equation is the solution to the equation $\mathrm{F}(\mathrm{x})=\mathrm{G}(\mathrm{x})$ ?
a. $X=-1$
b. $X=3$
c. $X=2$
d. $X=4$
12. Given $f(x)=5 x-3$ and $g(x)=4 x+2$ which value of $f(X)$ is a solution to the equation $f(x)=g(x)$ ?
a. $X=-2$
b. $X=1$
c. $X=5$
d. $X=3$
13. What is the average rate of change for the function $f(x)=5 x+3$ on the interval $-3<x<-1$ ?
a. 5
b. -12
c. -7
d. 8
14. 14. A cricket match charges customers an initial fee of $\$ 15$ to enter the gallery Show time cost an additional $\$ 10$ per hour. Which function represents the total cost in dollars, of watching it as a function having a show time in $t$ hours?
a. $\quad c(d)=15 t+12 d$
b. $\quad c(d)=15+18(t-1)$
c. $\quad c(d)=15+10 t$
d. $\quad c(d)=8 d+18(t-1)$
15. Which of the following ordered pair is a solution to the inequality $Y>2 X+3$.
a. $(4,5)$
b. $(1,4)$
c. $(2,8)$
d. $(3,7)$

