Accelerated Geometry B/Algebra II A Unit 4 Test Study Guide

Name: $\qquad$ 's favorite game is:

Directions: Find the perimeter of the figure given the points on a coordinate plane.

1. $A(2,3), B(5,-3), C(2,-3)$
2. $C(0,3), A(-1,-1), K(4,2), E(3,-2)$
3. $P(5,-1), L(1,2), U(9,-4), M(4,4)$
4. $S(0,3), M(-4,3), I(2,5), T(-8,1), E(6,2)$

## Directions: Find the area of each polygon with the given coordinates.

5. $C(-2,4), U(-2,0), P(1,3)$
6. $K(4,5), A(3,4), T(6,1), S(7,2)$

7. $M(-1,-5), A(0,-2), T(3,-3), H(2,-6)$

Directions: Find the coordinates that partitions the segment at the given ratio.
8. Partition the line segment $\overline{W M}$ at a ratio of $2: 5$, where $W(-4,2)$ and $M(3,9)$.
9. Partition the directed line segment $\overline{G M}$ at point $Q$, such that $Q$ lies $\frac{2}{5}$ of the way, given $G(-2,-3)$ and $M(1,7)$.
10. Find the coordinates of point $T$ that lies $\frac{1}{3}$ of the way on the directed line segment $\overline{G A}$, where $G(4,6)$ and $A(5,-1)$.

## Directions: Write the equation of the line with the given information.

11. A line parallel to $y=3 x+4$ and goes through point $(-1,-2)$.
12. A line perpendicular to $3 y+2 x=6$ and goes through the point $(3,3)$.
13. A line parallel to the line that goes through points $(4,2)$ and $(0,8)$ and goes through the point $(1,1)$.
14. A line perpendicular to the line that goes through points $(3,0)$ and $(-1,-1)$ and goes through point $(4,1)$.
15. A line perpendicular to the line that passes through $(1,2)(1,-4)$ and goes through the point $(4,3)$.
16. A line parallel to the line $4 y+3=2 x$ and goes through the point $(-2,-5)$.
