Name:

## QUIZ 19 - MATH GRADE 9

1. $(75 \%)$ Given the points $\mathrm{A}(0,-4)$ and $\mathrm{B}(8,2)$.
a. $(10 \%)$ Sketch the points on the graph.
b. ( $15 \%$ ) Find the distance between the points.
c. $(10 \%)$ Find the midpoint $M$ between the points and sketch it on the graph.
d. ( $10 \%$ ) Find the distance between M and A , explain how is it related to part b .
e. (10\%) Find a new pair of points whose midpoint is M: $\qquad$
f. $(20 \%)$ Find a point D of the form $(\mathrm{k}, 1)$ in such a way that $\mathrm{AD}=\mathrm{BD}$, sketch it on the graph.

2. ( $15 \%$ ) Given that the midpoint between $A(5,0)$ and $B$ is the point $M(-7,-10)$. Find point B
3. ( $10 \%$ ) Given that the midpoint between $\mathrm{A}(\mathrm{a}, \mathrm{b}+1)$ and $\mathrm{B}(0,0)$ is the point $\mathrm{M}(2 \mathrm{a}+3,-$ 10). Find point A
