Name $\qquad$ Date $\qquad$

## Summative Assessment Questions Linear and Quadratic Equations

1. On a Cartesian Coordinate system, there are two points $(1,5)$ and $(2,8)$ labeled on the graph. Write a linear relationship that includes these two points.
2. What is necessary for three points on a graph to be able to write a linear equation? Be specific.
3. Give an example of a linear relationship in the real world. Write an equation for this (it does not need to be accurate) and describe what the relationship means in terms of the variable you chose.
4. How fast does a fish swim if he starts going $2 \mathrm{~m} / \mathrm{s}$ for 3 seconds and his speed increases to 9 $\mathrm{m} / \mathrm{s}$ for another 3 seconds?
5. If $y=3 x^{\wedge} 2+5$, what is the area of the region bounded by that equation from $0<x<3$ and the $x-$ and $y$-axis.
