$\qquad$
$\qquad$ P

1) Here is a set of other quadratic equations. Select one (and an insurance problem) to show that you can solve a function for a specific variable.

| Level 1 <br> (Basic) | Level 2 <br> (Partially Prof.) | Level 3 <br> (Proficient) | Level 4 <br> (Advanced) |
| :--- | :--- | :--- | :--- |
| Surface Area of Cube | Pythagorean Theorem | Law of Gravity | Surface Area of Cone |
| Solve for s. | Solve for b. |  |  |
| $\mathrm{a}^{2}+\mathbf{b}^{2}=\mathrm{c}^{2}$ |  |  |  |

2) Describe another "real-life" situation that would create a non-linear, quadratic line. What are the two variables being compared? How would the two variables in your function's relationship affect one another? What do you think the equation for your function would be in terms of $x$ and $y ?$
