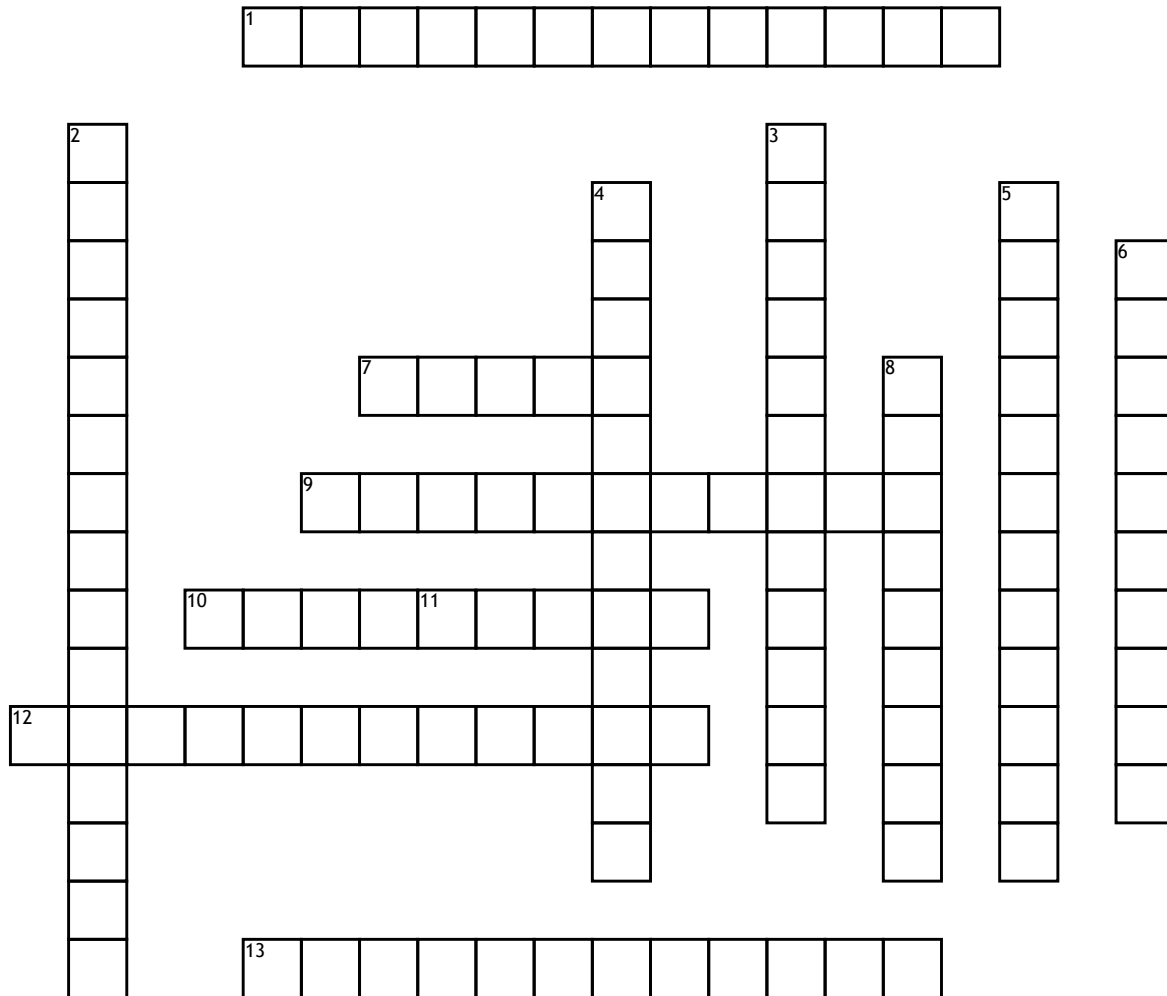


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Quadratic and Vertex Form Adventure



## Across

1. Plug in the corresponding values from the equation given to substitute the variables in the quadratic formula.  $t(x)=6x^2-12x+3$

7. 1. What is the vertex of the following equation?  $f(x)=(x-3)^2+6$

9. Of the following three forms: standard form, factor form, and vertex form, which ones shows the vertex without changing the equation? y-intercept (standard form), x-intercept (factor form) DOWN, vertex (vertex form)

10. Solve the equation that you filled in from problem #4

12.  $p(x)=$  twelve plus/minus square root of negative twelve square minus four times four times negative three all over or divided by twelve. Given the information above, what is the equation? (Standard form)

13. Create an equation based on the graph  $h(x)$ . (vertex form).

## Down

2. Factor the following equation given,  $s(x)=x^2+10x+24$

3. What form is the equation?

4. Change the following equation into vertex form  $g(x)=x^2-6x+3$

5. Of the following three forms: standard form, factor form, and vertex form, which ones shows the y-int without changing the equation? y-intercept (standard form), x-intercept (factor form), vertex (vertex form)

6. Of the following three forms: standard form, factor form, and vertex form, which ones shows the x-int without changing the equation? y-intercept (standard form), x-intercept (factor form), vertex (vertex form)

8. The Box Method is a method we can use when factoring quadratic equations.

11. Graph the information given, What is the value of "a"?  $k(x)=-(x+4)^2-1$