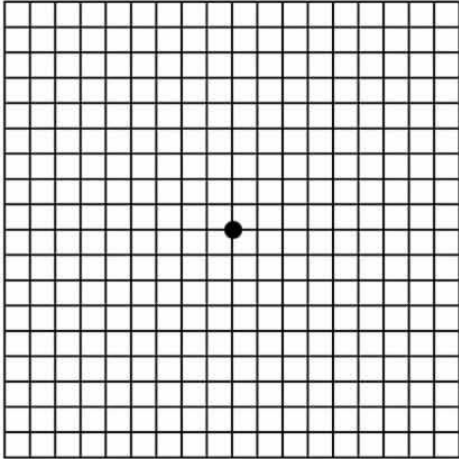


Name: _____
Date: _____
Class: _____

Algebra
Unit 10
HW 10-3

1) Graph both $g(x) = (x - 2)^2 - 4$ and $f(x) = x^2$. How do the points of $g(x)$ compare to the points of $f(x)$? What shift of $f(x)$ would move it to $g(x)$?



2) Describe the shift that would take $y = x^2$ to $y = (x - 8)^2 + 5$. What would the vertex of each equation be?

3) Describe the shift that would take $f(x) = |x - 7| - 9$ and move it to $g(x) = |x|$.

4) Create an equation that would move $y = |x - 2| + 6$ to the right 6 and down 5.

5) Create an equation that would move $y = (x + 6)^2 - 10$ to the right 9x and up 16.

6) Solve using complete the square: $9x^2 - 14x + 19 = 0$

7) Find the zeros of the function: $f(x) = x^2 - 8x - 56$