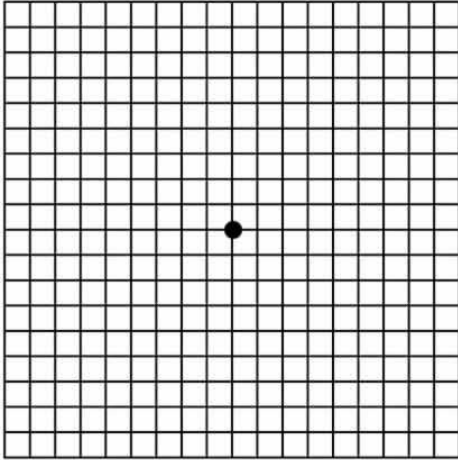


Name: _____
Date: _____
Class: _____

Algebra
Unit 10
HW 10-4

1) Graph both $y = \sqrt{x+4} + 2$ and $y = \sqrt{x}$ on the same graph. Describe the change that the 2nd equation must go through to become the 1st equation.



2) Create a function that would shift $g(x) = \sqrt{x-9} + 4$ to the left 8 units and up 9.

3) Describe the transformation that $y = 2^x$ would have to go through to become $y = 2^{x-4} + 7$.

4) Create an equation that would move $y = 5^{x+2} - 7$ down 2 units and to the right 7 units.

5) Solve: $81 - x^2 + 18x = 125 - 2x^2$

6) Find the solution to the system: $g(x) = 3x^2 + 2x + 16$ and $y(x) = 432 + 3x^2 + 10x$

7) Find the zeros to the function: $h(x) = 15x^2 - 18x + 5$