

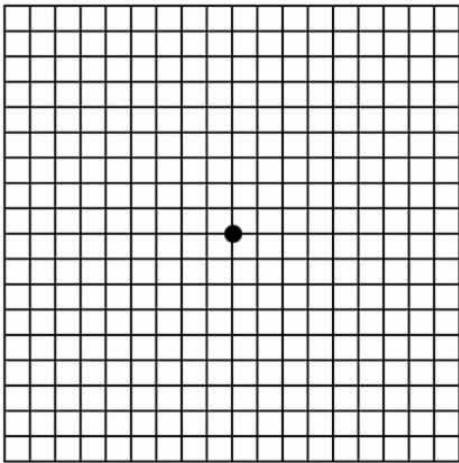
Name: _____
Date: _____
Class: _____

Algebra
Review
Graded Homework 14

Show all of your work for every problem. The numbers in the brackets are the points that each problem is worth. Multiple Choice Problems are worth 3.
NO WORK = ZERO CREDIT

1) [4] Bob is walking at a rate of 2mph. Steve is walking at a rate of 3mph. Bob has a 3 hour head start. How many miles will Bob have walked after Steve starts walking, when Steve catches him?

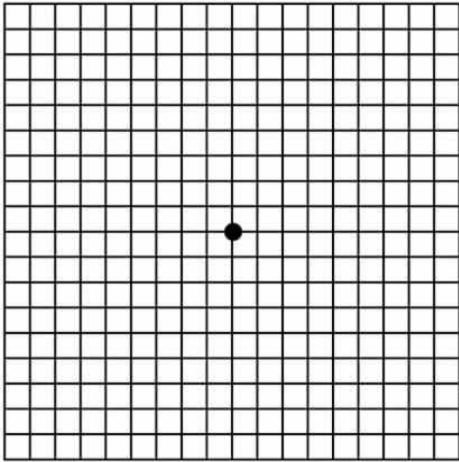
2) [4] Solve: $|x - 2| = -x^2 + 4x - 2$



3) [4] Solve the following system: $5x - 10y = 23$ and $2x + 10 = y$

4) [3] Is $(-2, 18)$ a solution to the following system: $y = x^2 - 4x + 6$ and $y = x - 16$

5) [3] Solve this system: $700 \leq 125x + 50y$ and $x + y \leq 10$



6) [3] Simplify: $6x^2(8x^3 - 2x - 5) - 8x(7x^3 - 2x + 9) - 9x^5$

7) [4] Two people buy pens and pencils. Person A buys 8 pencils and 9 pens and spends \$1.64. Person B buys 6 pens and 14 pencils and spends \$1.70. How much would it cost to buy 10 pencils and 10 pens?

8) [3] Find the equation of a line that is perpendicular to $5y - 3x = 30$. Your new line must pass through $(-4, 2)$.