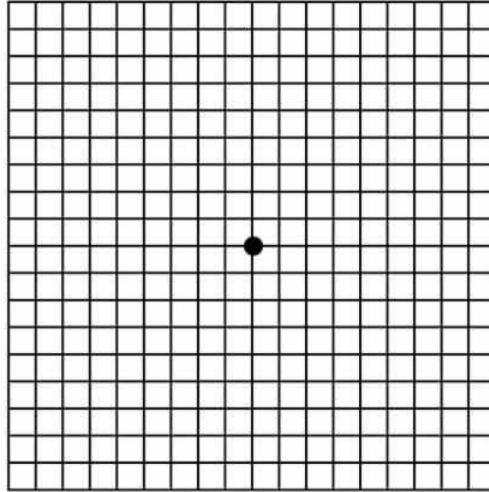


Name: _____
Date: _____
Class: _____

Geometry
Review
Graded Homework 15

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] Is Quadrilateral ABCD a rhombus? A (-1, -1), B (2, 1), C (4, -2), D (1, -4)



2) [3] A birdwatcher observes a bird sitting on a telephone pole at an angle of depression of 27° . He is 27ft away from the telephone pole. How far is the bird from the birdwatcher to the nearest tenth?

3) [3] Find the equation of a perpendicular bisector to a segment with endpoints (-4, -5) and (-8, -10).

4) [3] If two complementary angles are represented by $4x + 4$ and $7x + 9$ find the measure of the larger of the two angles.

5) [3] If the diagonal of a square is 14 inches find the perimeter of the square.

6) [4] If the base of an isosceles triangle is represented by $3x + 1$ while the legs are represented by $2x + 5$ and $4x - 7$, find the measure of the vertex angle of this triangle to the nearest hundredth of a degree.

7) [3] If two similar octagons have a scale factor of 3:7, the area of the larger octagon is represented by $20x - 17$ and the area of the smaller is represented by $6x - 45$, find the difference in the areas of these two octagons.

8) [3] If a triangle is transformed using the following composition:
 $r_{(-1,7)} \circ R_{90^\circ} \circ r_{y=x} \circ D_4 \circ r_{x=19}$ will the image have the same or opposite orientation?
Explain your answer.