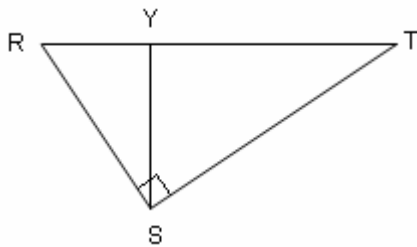


Name: _____
Date: _____
Class: _____

Geometry
Review
Graded Homework 16

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]



$SY = x + 2$, $RY = x$, $YT = 2x + 4$
Find ST to the nearest tenth

2) [3] Segment XT has points Y and H on it (points are in order X, Y, H, T on the segment). $XT = 108$ and $XY:YH:HT = 5:7:6$. Find an explain XH

3) [4] In an isosceles triangle the base is represented by $2x + 12$, while the legs are represented by $3x - 9$ and $x + 9$. Find the measure of the vertex angle of this isosceles triangle.

4) [3] If an equilateral triangle has a perimeter of 18, find the area.

5) [3] Two similar regular hexagons have a scale factor of 4:15. One side of the smaller hexagon is 8ft. Find the perimeter of the larger hexagon.

6) [3] If a shadow is cast from a tree with an angle of depression of 12° and the shadow is 15 feet long. How tall is the tree?

7) [4] If a rhombus has a side represented by $x + 1$, shorter diagonal by $2x - 2$, and longer diagonal by $2x$, find the perimeter of this rhombus.

8) [3] $\angle DKY$ is bisected by \overrightarrow{KZ} in such a manner that $m\angle DKY = 3x + 3$ and $m\angle DKZ = x + 8$ find $m\angle ZKY$.