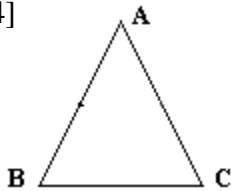


Name: _____
 Date: _____
 Class: _____

Geometry
 Review
 Graded Homework 28

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

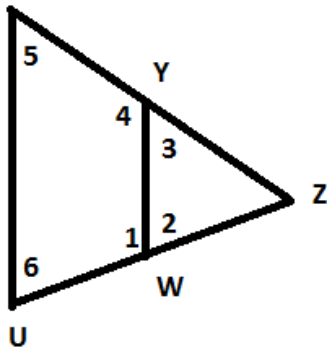
1) [4]



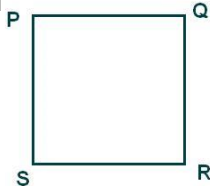
$\triangle ABC$ is isosceles with $\angle B$ as the vertex angle.
 $m\angle A = 10x - 8$ and $m\angle B = 11x + 10$. $AC = 20$.
 Find the area of $\triangle DEF$ which is similar to $\triangle ABC$ and has a scale factor of 1:3 ($\triangle ABC : \triangle DEF$)

2) [3] Find the center of the circle represented by the equation: $y^2 + x^2 - 9x + 4 = 0$

3) [4] In the following diagram $\angle 5 \cong \angle 2$. If the perimeter of $\triangle ZYW$ is 50,
 x $ZW = 2x + 3$, $WU = 4x + 12$, $ZY = 2x$, and $ZX = 10x - 3$, find YW .



4) [3]



$PQRS$ is a parallelogram with $\overline{PQ} \cong \overline{QR}$ and $\overline{PQ} \perp \overline{QR}$.
 If $PQRS$ is rotated continually around QR , and $SR = 16\text{ft}$
 find the volume of the figure that is created by the rotation.

5) [2] Which regular polygon has a minimum rotation of 30 degrees to carry the polygon onto itself?

6) [3] In right $\triangle RSY$, $\angle Y$ is a right angle and $\overline{RY} \cong \overline{YS}$. Which of the following is not true?

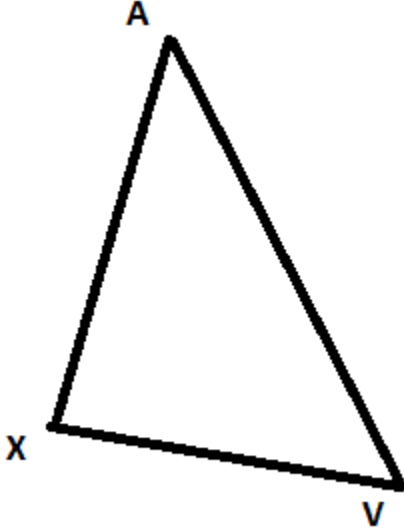
1) $\cos(S) = \cos(R)$

2) $\sin(S) = \sin(R)$

3) $\tan(S) = \tan(Y)$

4) $\tan(S) = \tan(R)$

7) [3] Construct the centroid if the following triangle:



9) [6] If $B(4, 3)$, $A(2, -2)$, and $D(12, -6)$, What type of triangle is ABD ? Place point C so that $ABCD$ is a rectangle and prove that $ABCD$ is a rectangle.