CMIC 2 – Unit 3 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Identifying Triangles

1. Using coordinate geometry, classify $∆ABC$ as scalene, isosceles, or equilateral given the vertices located at $ABC= \left[\begin{matrix}-2&2&0\\-2&-2&5\end{matrix}\right]$.
2. Find the perimeter of $∆PQR$ with vertices located at$ PQR= \left[\begin{matrix}-4&-1&6\\-2&-6&-3\end{matrix}\right]$.
3. Is $∆UGA$, formed by the points $UGA= \left[\begin{matrix}-3&1&5\\-3&7&3\end{matrix}\right]$, a right triangle? Justify you answer using coordinate geometry.
4. Using coordinate geometry, classify $∆MNO$ as scalene, isosceles or equilateral give the vertices located at $MNO= \left[\begin{matrix}1&-1&-4\\4&1&3\end{matrix}\right]$.
5. Is $∆DEF$, formed by the points $DEF= \left[\begin{matrix}0&5&7\\4&3&9\end{matrix}\right]$ a right triangle? Justify your answer using coordinate geometry.
6. Give the coordinates of the vertices of an isosceles, right triangle with leg lengths of 8 units.

