8-6 LAB GEOMETRY WORKSHEET Name _____ Section _____Due _____

For questions 1-3, be sure to include a drawing, solve for the missing side, and write the desired trig ratio.

1. Given $tan\theta = \frac{24}{7}$, find the ratio $cos\theta$.

2. Given $sin\theta = \frac{5}{6}$, find the ratio $cos\theta$.

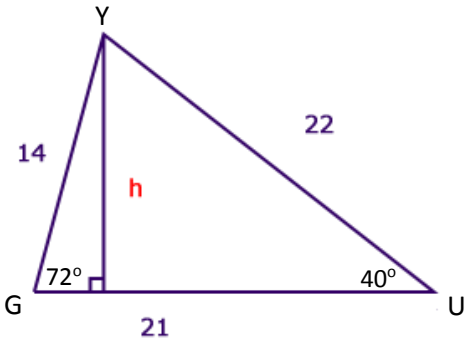
3. Given $cos\theta = \frac{\sqrt{3}}{2}$, find the ratios $sin\theta$ and $tan\theta$.

→Think back to earlier lessons – what do you think the measure of θ is for example 3? _____

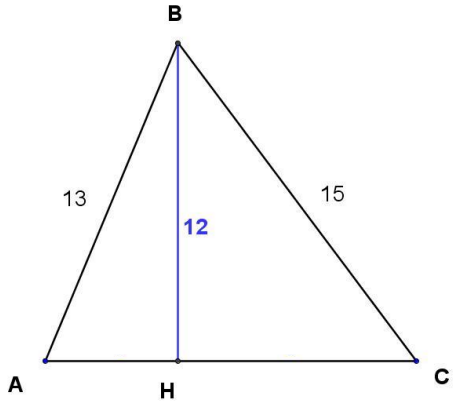
Why? _____

For questions 4-7, consider which solving method(s) to apply: Pythagorean Theorem (plus triplets), Geometric Mean, or Trig.

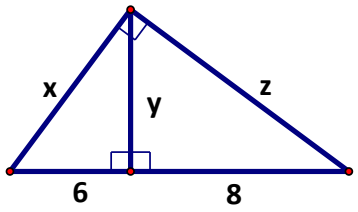
4. Determine the height of triangle GUY where GU=21.



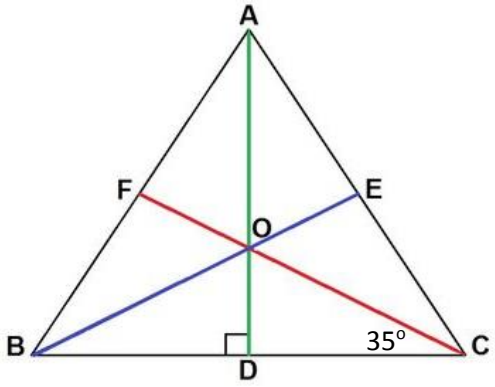
5. Determine the area of the triangle ABC with the altitude $\overline{BH}$.



6. Solve for x, y, and z to the nearest tenth.



7. O is the centroid of isosceles ΔABC with base BC=12 inches. If $m\measuredangle OCD = 35°$, determine OD, to the nearest hundredth of an inch.



Extra credit: determine AO to the nearest tenth of an inch.