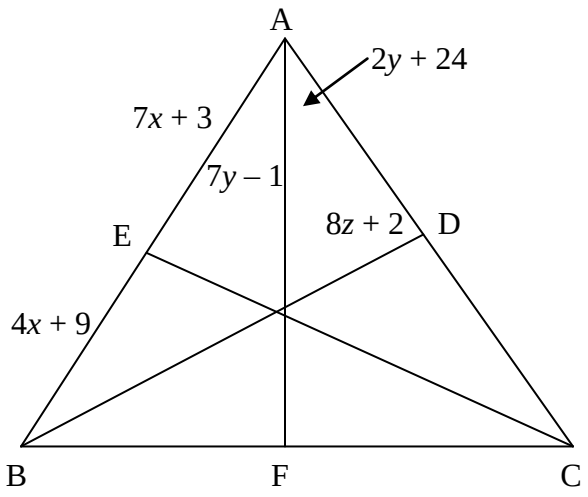
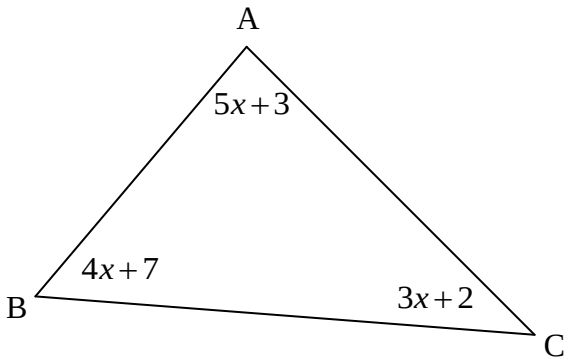
Name_____Per._____Date_____
Geometry Ch. 5 Practice Test

1. In the following figure ΔABC, $\overline{AF}$ is an ∠ bisector, $\overline{BD}$ is an altitude, and $\overline{CE}$ is a median. Find *x*, *y*, and *z*.

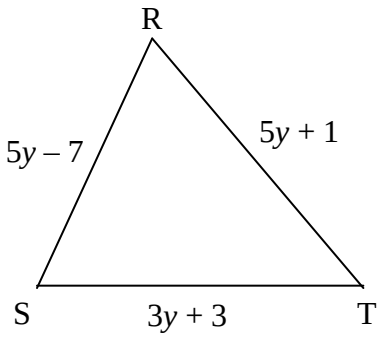


2. Given ΔDEF with $\overline{EG}$ as a median and DG = 2*x* + 1, *m*∠DEG = 9*x* + 5, *m*∠EGF = 19*x* + 14, GF = 3*x* – 2, and *m*∠GEF = 11*x* – 1.
Find *x*.

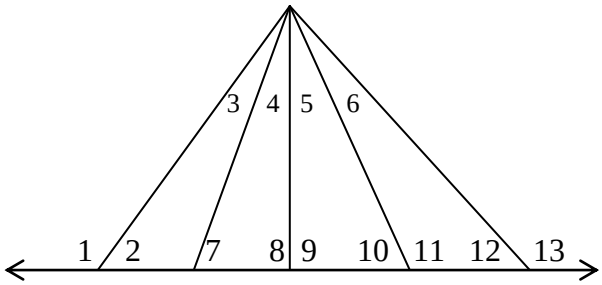
3. List the sides in order from least to greatest.



4. In ΔRST the perimeter is 49.
   List the angles in order from least to greatest in ΔRST.



5. Which $\angle$ is greater, $\angle 9$, $\angle 2$, or $\angle 4$?



6. If the measures of two sides of a triangle are 8 and 19, what are the possible measures of the third side?

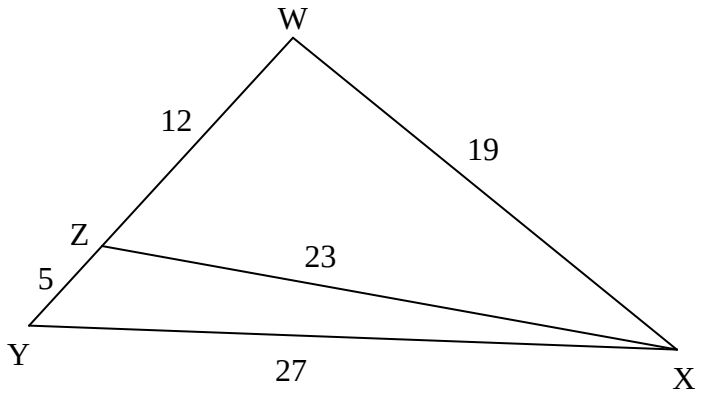
For questions 7-8, determine if it is possible to have a triangle with the give side lengths.

7. 7, 14, 7

8. 5, 5, 2

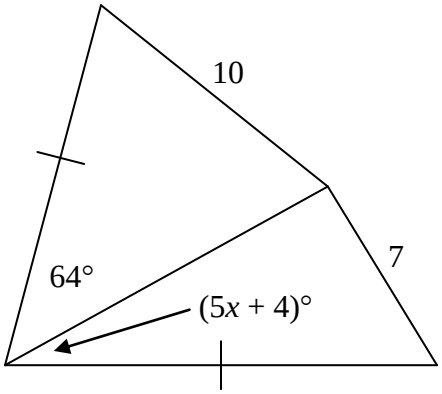
Use the figure below for problems 9-10.

9. Which angle is the smallest in ΔWXZ?



10. Which angle is the largest in ΔZXY?

11. Write a pair of inequalities to describe the possible values of x.



12. Write an inequality to describe the possible values of x.