HW 7-3: Angles of Triangles

Use the number of sides to tell what kind of polygon the shape is.





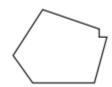
2. 8 sides



3.



7.



10 sides

8. 9 sides

Use the number of sides of the traffic sign to tell what kind of polygon it is.

9.



11.



10.

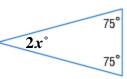


12.



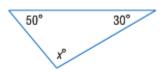
Find the value of *x* in each triangle with the given angle measures.

13.



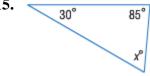
19. The measures of the angles of $\triangle RST$ are in the ratio 2:4:9. What are the measures of the angles?

14.

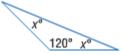


20. The measures of the angles of $\triangle XYZ$ are in the ratio 3:3:6. What are the measures of the angles?

15.



16.

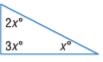


Find the value of *x* in each triangle.

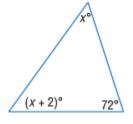
21.



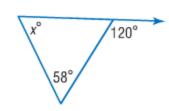
17.



18.



22.



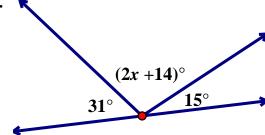
23.



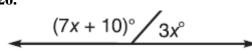
24. In $\triangle ABC$ the measure of angle A is 2x + 3, the measure of angle B is 4x + 2, and the measure of angle C is 2x - 1. What are the measures of the angles?

Find the value of x.





26.



Find the indicated angle measure. (There may NOT be enough information to find the value.) Justify your answer by naming the angle relationship and angles used.

27. $m \angle 2$



29.
$$m \angle 4$$

