

Name: \_\_\_\_\_

Period: \_\_\_\_\_

Score: \_\_\_\_\_ / \_\_\_\_\_ = \_\_\_\_\_ %

## HW 7-3

### Int 1

### Angles of Triangles

### Unit 7

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

1.



5.



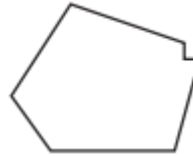
2. 8 sides

6. 6 sides

3.



7.



4. 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.

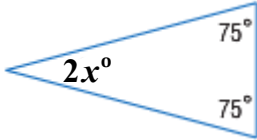


12.

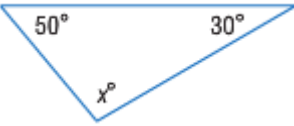


Find the value of  $x$  in each triangle with the given angle measures.

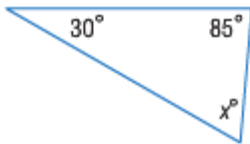
13.



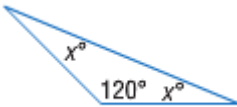
14.



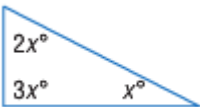
15.



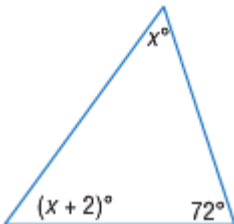
16.



17.



18.

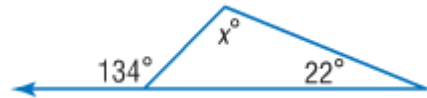


19. The measures of the angles of  $\triangle RST$  are in the ratio **2:4:9**. What are the measures of the angles?

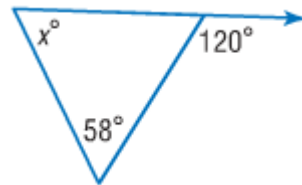
20. The measures of the angles of  $\triangle XYZ$  are in the ratio **3:3:6**. What are the measures of the angles?

Find the value of  $x$  in each triangle.

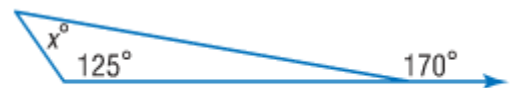
21.



22.



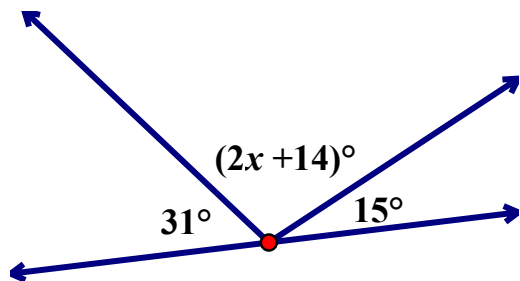
23.



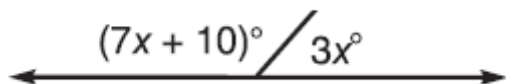
24. In  $\triangle ABC$  the measure of angle  $A$  is  $2x + 3$ , the measure of angle  $B$  is  $4x + 2$ , and the measure of angle  $C$  is  $2x - 1$ . What are the measures of the angles?

Find the value of  $x$ .

25.



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.  $m\angle 2$

28.  $m\angle 7$

29.  $m\angle 4$

