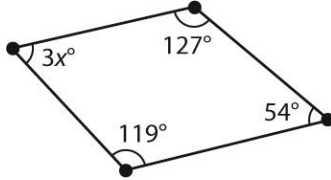


7.1 Show All Work!!

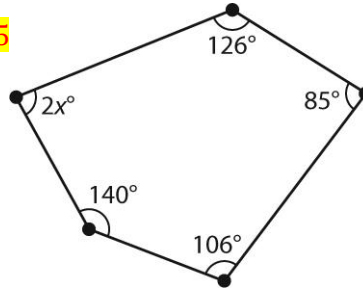
1. The interior angles of a triangle have measures of 55° , 25° , and x° . What is x ? **100°**

2. Find x .

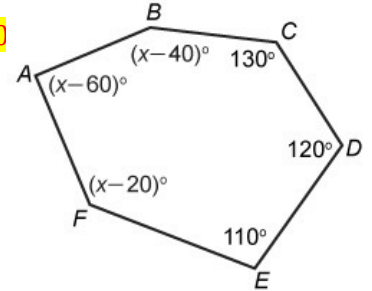
a. **$x = 20$**



b. **$x = 41.5$**



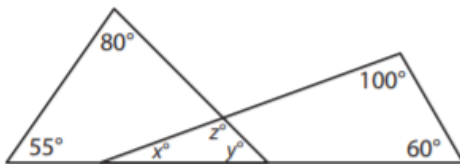
c. **$x = 160$**



3. Find the number of sides on a polygon with an interior angle sum of 3780°. **23 sides**

4. Determine the unknown angle measures a hexagon whose six angles measure 69° , 108° , 135° , 204° , b° and $2b^\circ$. **68° and 136°**

5. Determine the measures of angles x , y , and z . **$x = 20$, $y = 45$, $z = 115$**



6. Find and explain what this student did incorrectly when solving the following problem. What type of polygon would have an interior sum of 1260° ?

$$1260 = (n - 2)180$$

$$7 = n - 2$$

$$5 = n$$

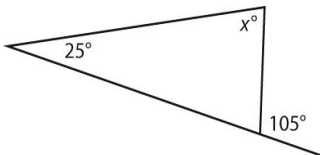
The polygon is pentagon.

The student subtracted 2 instead of adding.

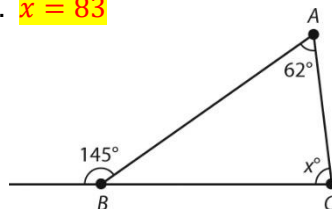
The polygon is a nonagon. (9-sided)

7. Find x .

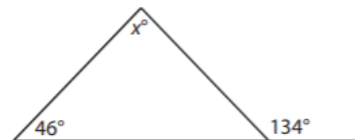
a. **$x = 80$**



b. **$x = 83$**

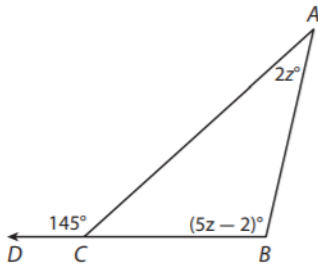


c. **$x = 88$**



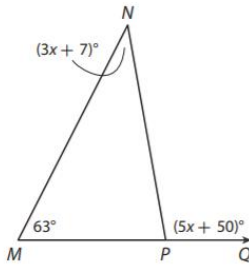
8. $x = 103^\circ$

Find $m\angle B$.



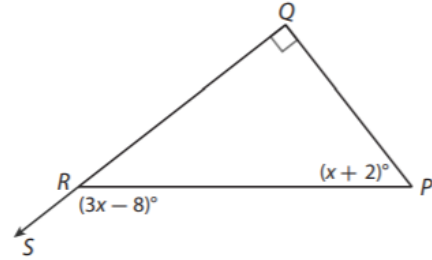
9. 37°

Determine $m\angle N$ in $\triangle MNP$.



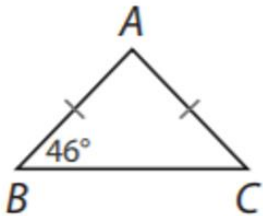
10. 142°

Find $m\angle PRS$.

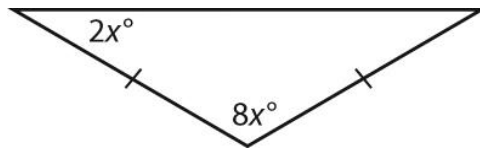


7.2 Isosceles and Equilateral Triangles **Show all work!!**

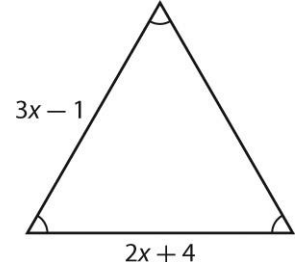
11. Find $m\angle A$. 88°



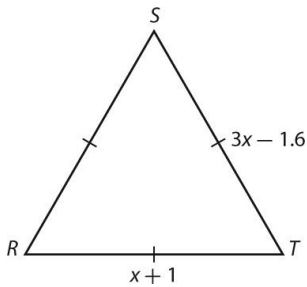
12. Solve for x . 15



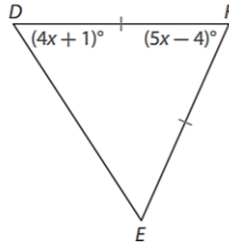
13. Solve for x . 5



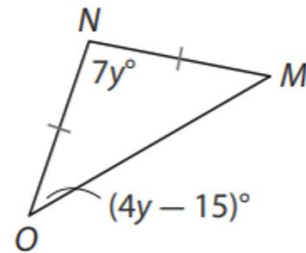
14. Find \overline{RS} . 2.3



15. Find $m\angle E$. 57°



15. Find $m\angle O$. 41°



16. Show work on the figure.

Match each angle with its corresponding measure, given $m\angle 1 = 130^\circ$ and $m\angle 7 = 70^\circ$. Indicate a match by writing the letter for the angle on the line in front of the corresponding angle measure.

A. $m\angle 2$

 A 50°

B. $m\angle 3$

 B 60°

C. $m\angle 4$

 D 70°

D. $m\angle 5$

 E 110°

E. $m\angle 6$

 C 120°

