

Mixed Polygon Problems

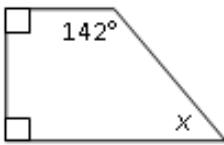
1. Find the interior and exterior angles of a regular 12 sided figure.

7. Find the number of sides of a regular n -gon if the sum of the interior angles is 2520° .

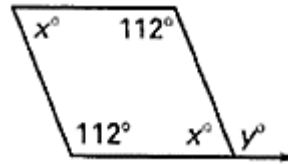
2. Find the number of sides of a regular n -gon if one exterior angle measures 20° .

8. If each exterior angle of a regular polygon measures 12° , how many sides will the polygon have?

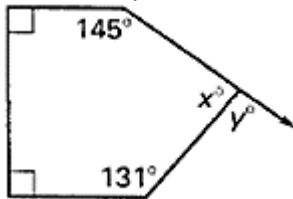
3. Find x .



9. Find x and y .



4. Find x and y .



10. The angles of a 5 sided figure are : $91^\circ, 160^\circ, 100^\circ, 80^\circ$ and x . Find x .

5. The sum of the measures of the interior angles of a regular polygon is 2340° . How many sides does the polygon have?

11. Find the sum of the **exterior angles** in a 100-gon.

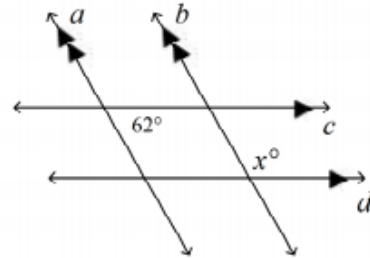
6. The angles of a 6 sided figure are : $110^\circ, 116^\circ, 112^\circ, 110^\circ, x^\circ, x^\circ$. Find x .

12. Find the sum of the **interior angles** of a 7-gon.

13. Find the number of sides of a regular polygon that has an interior angle of 160°

17.

Find the value of x .

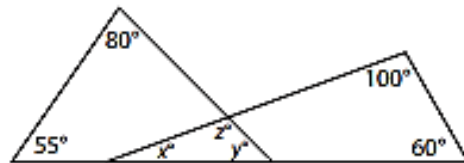


14.

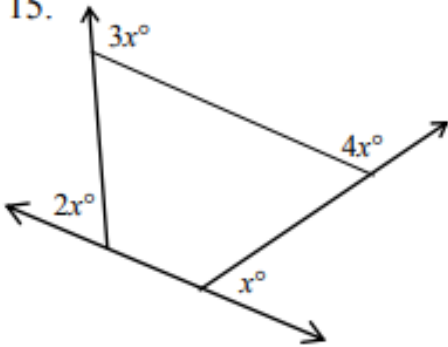
If the sum of the interior angles of a regular polygon is 900° , find the number of sides.

18.

Determine the measures of angles x , y , and z .



15.

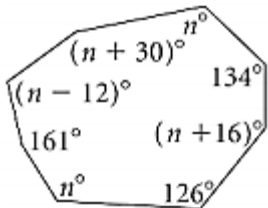


Find the value of x .

19.

If the measure of one interior angle of a regular polygon is 144° , find the number of sides.

16. Find the value of n .



20.

Find x , and determine if AD is parallel to BC . Justify.

