

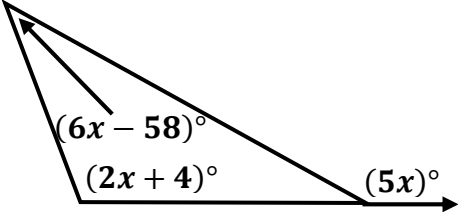
7.1 – INTERIOR AND EXTERIOR ANGLES OF POLYGONS

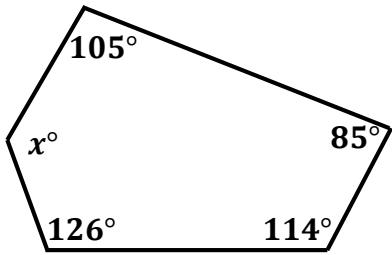
For each of the following regular polygons, find: a) the sum of the interior angles, b) the measure of each interior angle, c) the sum of the exterior angles, and d) the measure of each exterior angle.

1. a) _____ b) _____ c) _____ d) _____	A triangle
2. a) _____ b) _____ c) _____ d) _____	A quadrilateral
3. a) _____ b) _____ c) _____ d) _____	A pentagon
4. a) _____ b) _____ c) _____ d) _____	A hexagon
5. a) _____ b) _____ c) _____ d) _____	A heptagon

6. a) _____ b) _____ c) _____ d) _____	An octagon
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Find the value of 'x' in each of the following.

7. $x =$ _____	
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8. $x =$ _____	
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For each of the following polygons, find: a) the sum of the measures of the interior angles and b) the sum of the measures of the exterior angles.

9. a) _____ b) _____	A 30-sided polygon
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10. a) _____ b) _____	A 10-sided polygon
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For each of the following regular polygons, find: a) the measure of each exterior angle and b) the measure of each interior angle.

11. a) _____ b) _____	A 14-sided polygon
12. a) _____ b) _____	A 15-sided polygon

Find the number of sides for each of the following.

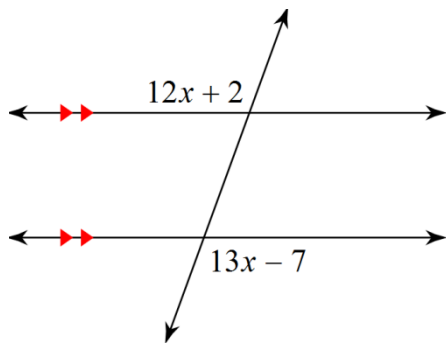
13. $n =$ _____	The measure of one interior angle of a regular polygon is 144° . Find the number of sides of the polygon.
14. $n =$ _____	The measure of one interior angle of a regular polygon is 157.5° . Find the number of sides of the polygon.
15. $n =$ _____	The measure of one exterior angle of a regular polygon is 24° . Find the number of sides of the polygon.
16. $n =$ _____	The measure of one exterior angle of a regular polygon is 18° . Find the number of sides of the polygon.

REVIEW

17. $CD =$ _____	Find CD if $C(0, 3)$ and $D(4, 7)$.
18. (_____, _____)	Find the midpoint of \overline{CD} if $C(0, 3)$ and $D(4, 7)$.

Solve for x .

19.



20.

