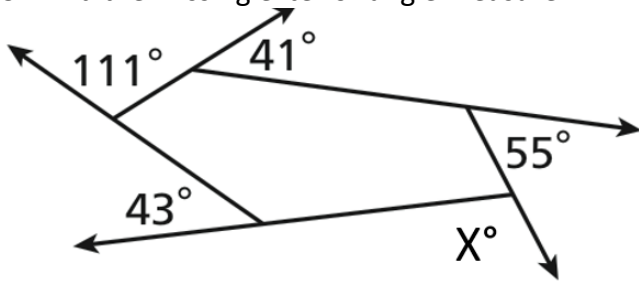# Polygon Angle Sum Practice #1-15

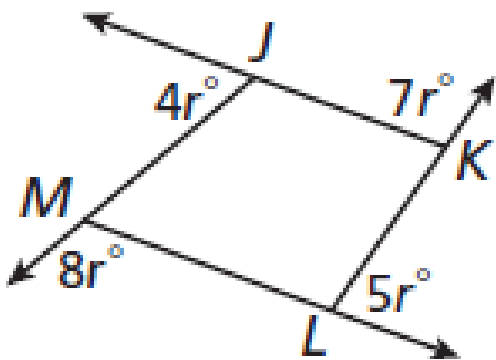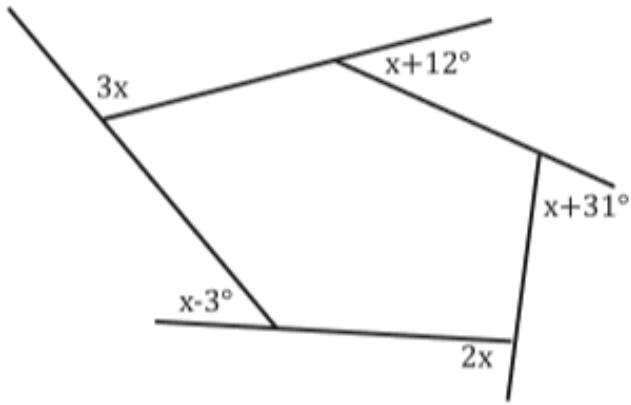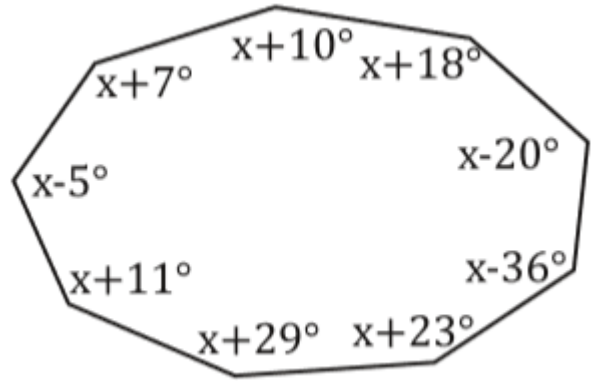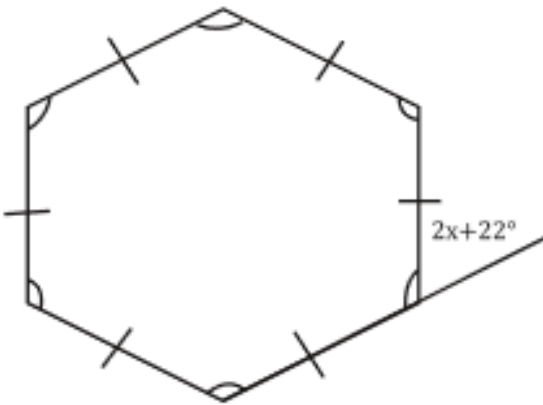|	
1. Find the sum of the interior angle measures of a convex dodecagon.	2. Find the sum of the interior angle measures of a convex seventeen-gon.
3. Find the missing exterior angle measure. 111° 41° 55° 43° X°	4. A. Find the measure of each exterior angle of a regular heptagon. B. What did you need to know in part A to know that each exterior angle would be the same measure?
5. Find the measure of each exterior angle of a regular 25-gon.	6. Find the measure of each exterior angle of a regular dodecagon.
7. Find the value of r in polygon JKLM then find each angle measure. J 4r° 7r° K M 8r° 5r° L	8. Find the measure of each interior angle of pentagon ABCDE. C 5z° B 4z° 3z° D A 3z° 5z° E
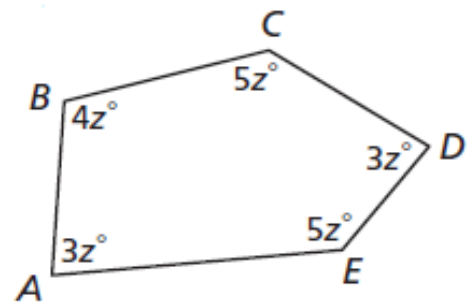
9. Find the measure of each angle in the polygon.	10. Find the measure of each interior angle of the polygon.
3x x+12° x+31° x-3° 2x	x+7° x+10° x+18° x-5° x-20° x+11° x-36° x+29° x+23°
11. Find the value of x.	12. Find the value of x.
2x+22°	2x+38°
13. Find the value of x.	14. Find the value of x.
$x°$ $(x + 22)°$ $(x + 22)°$ $x°$	$x°$
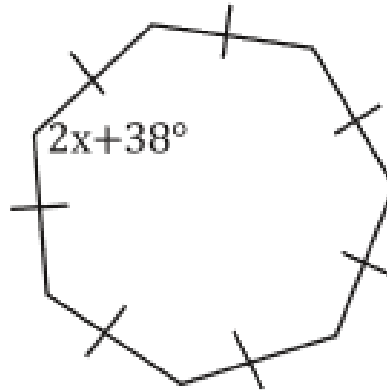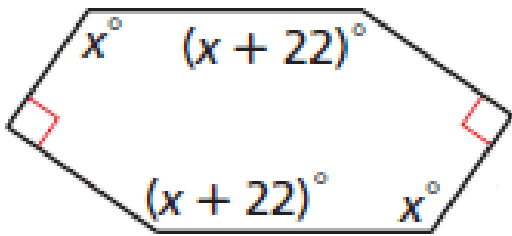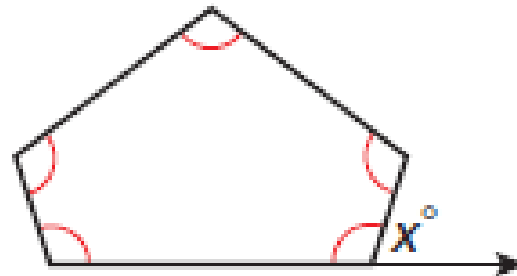
15. Find the number of sides a regular polygon must have to meet the following condition:

Each interior angle measure is four times the measure of each exterior angle.