

Name _____ Date: _____ Hour: _____

Section 6.1 Practice

1. What is the sum of the interior angle measures of a 32-gon? What is the sum of the exterior angle measures?

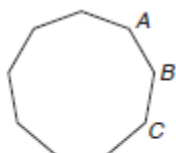
2. If the polygon shown is regular, what is $m\angle ABC$?

F 140°

G 144°

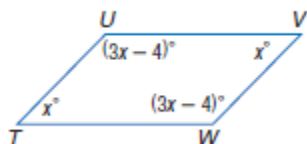
H 162°

J 180°

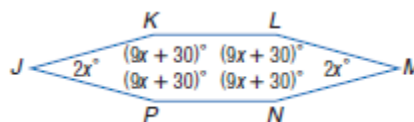


For 3-4, Find x and the measure of each angle.

3.



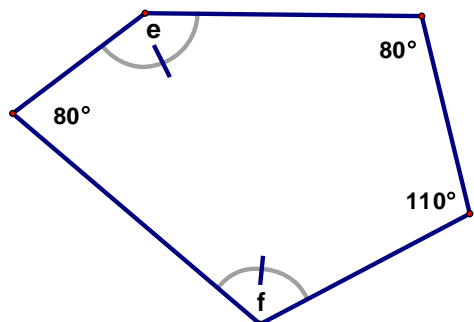
4.



5. Find x .

decagon in which the measures of the interior angles are $x + 5$, $x + 10$, $x + 20$, $x + 30$, $x + 35$, $x + 40$, $x + 60$, $x + 70$, $x + 80$, and $x + 90$

6. Find the measures of $\angle e$ and $\angle f$. Show all your work.



7. What is the sum of the measures of the exterior angles of a nonagon?
8. What is the measure of an exterior angle of an equiangular hexagon?
9. How many sides does a regular polygon have if each exterior angle measures 36° ?
10. How many sides does a polygon have if the sum of its interior angle measure is 4140° ?
11. If a regular polygon has 24 sides, what is the measure of each interior and exterior angle?
12. What is the measure of an individual angle of a regular 25-gon?
13. What is the measure of an individual interior angle of a regular dodecagon?
14. The measure of an interior angle of a regular polygon is 140° . Find the number of sides the regular polygon has.
15. What is the sum of the measures of the exterior angles of a dodecagon?
16. What is the measure of an exterior angle of an equiangular pentagon?
17. How many sides does a regular polygon have if each exterior angle measures 22.5° ?
18. The measure of an interior angle of a regular polygon is 140° . Find the number of sides the regular polygon has.
19. The measure of an interior angle of a regular polygon is 108° . Find the number of sides the regular polygon has.
20. How many sides does a regular polygon have if each exterior angle measures 14.4° ?