

**REVIEW 8.1-8.3**

\*\*Round to nearest tenth as needed.\*\*

Name \_\_\_\_\_ Hour \_\_\_\_\_

Part A: Write down the number of sides for each given polygon.

- |             |                  |              |
|-------------|------------------|--------------|
| 1. triangle | 2. heptagon      | 3. hexagon   |
| 4. decagon  | 5. quadrilateral | 6. octagon   |
| 7. nonagon  | 8. pentagon      | 9. dodecagon |

Part B: Find the **sum** of the **interior angles** of each polygon. **FORMULA:** \_\_\_\_\_

10. 154-gon
11. decagon
12. 17-gon

Part C: Find the measure of **each interior angle** of the following **regular** polygons.  
**FORMULA/PROCESS:** \_\_\_\_\_

13. triangle
14. 25-gon
15. 11-gon

Part D:

WHAT IS THE **SUM OF THE EXTERIOR ANGLES OF ANY POLYGON??** \_\_\_\_\_

Find the measure of **each exterior angle** of the given **regular** polygon. **FORMULA:** \_\_\_\_\_

16. 62-gon
17. 18-gon
18. heptagon

Part E: Given the measure of one interior angle of a **regular** convex polygon, find the measure of one of the exterior angles. **FORMULA:** \_\_\_\_\_

19. Interior angle:  $22^\circ$   
Exterior angle:
20. Interior angle:  $145^\circ$   
Exterior angle:

21. Interior angle:  $71^\circ$   
Exterior angle:

Part F: Given the measure of one exterior angle of a **regular** convex polygon, find the measure of one of the interior angles. **FORMULA:** \_\_\_\_\_

22. Exterior angle:  $53^\circ$   
Interior angle:

23. Exterior angle:  $145^\circ$   
Interior angle:

Part G: Given the sum of the measures of the interior angles of a convex polygon, find the number sides in each polygon. **FORMULA/PROCESS:** \_\_\_\_\_

24. 4500

25. 10800

26. 1620

Part H: Given an exterior angle measure of a **regular** polygon, find the number of sides. **FORMULA/PROCESS:** \_\_\_\_\_

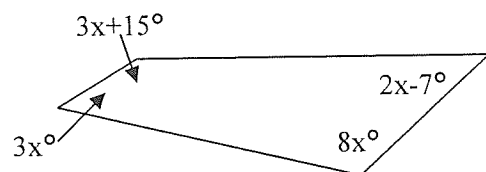
27.  $22.5^\circ$

28.  $45^\circ$

29.  $10^\circ$

Part I: Find  $x$  in each problem.

30.



31.

