Geometry SHOW WORK Name_____
3-5 worksheet

For 1-6, find the sum of the interior angles and exterior angles in a figure with the given number of sides.

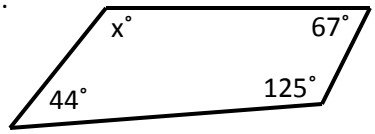
1. 12 2. 6 3. 24 4. 15 5. 4 6. 8

Int. sum_____ Int. sum _____ Int. sum_____ Int. sum_____ Int. sum_____ Int. sum_____

Ext. sum_____ Ext. sum _____ Ext. sum_____ Ext. sum_____ Ext. sum_____ Ext. sum_____

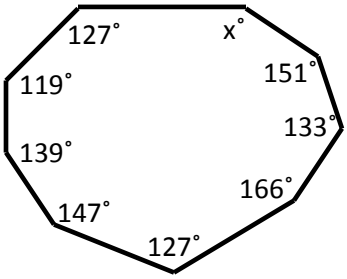
For 7-12, find the value of x.

7.



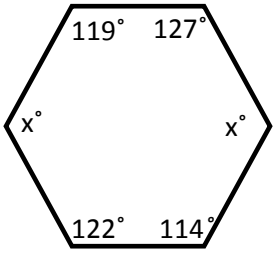
x = _____

8.



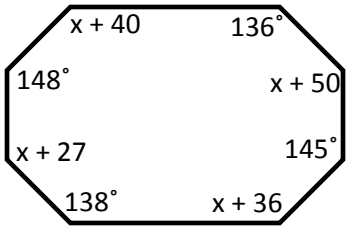
x = _____

9.



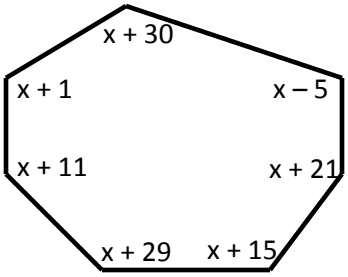
x = _____

10.



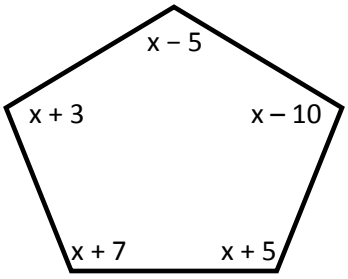
x = _____

11.



x = _____

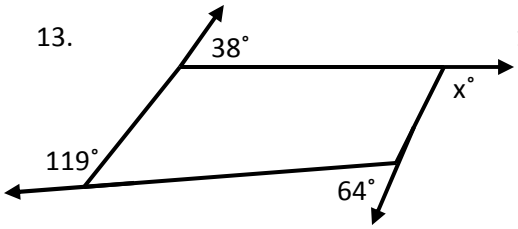
12.



x = _____

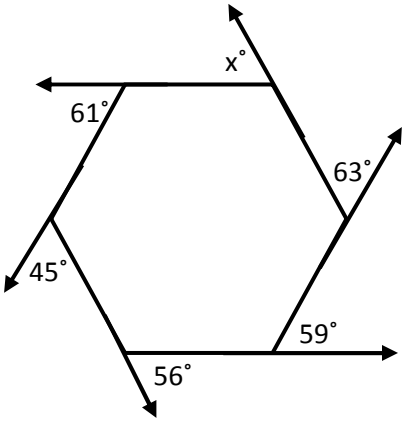
For 13-18, find the value of x.

13.



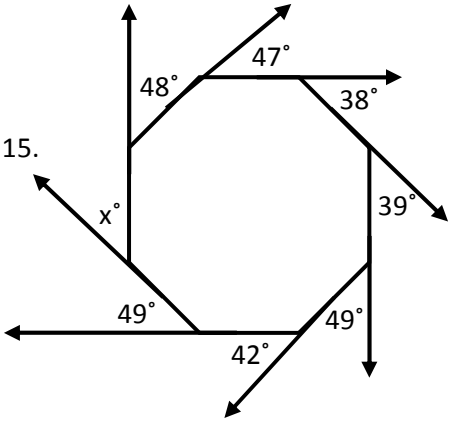
x = _____

14.



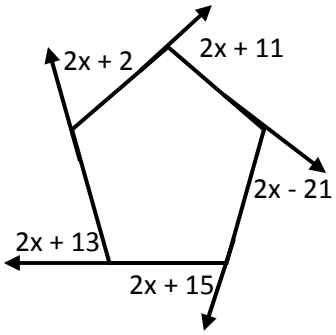
x = _____

15.



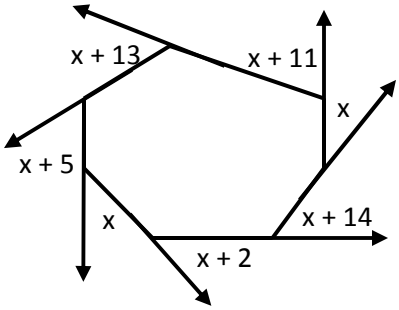
x = _____

16.



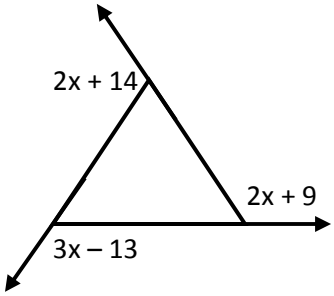
x = _____

17.



x = _____

18.



x = _____

Find the measure of one interior and one exterior angle in a regular polygon with the given number of sides.

19. 5 20. 9 21. 30 22. 8 23. 72 24. 10

Int. ∠_____ Int. ∠ _____ Int. ∠_____ Int. ∠_____ Int. ∠_____ Int. ∠_____

Ext. ∠_____ Ext. ∠ _____ Ext. ∠_____ Ext. ∠_____ Ext. ∠_____ Ext. ∠_____

Find the number of sides in a regular polygon with the given angle measure.

25. Interior ∠= 60˚ 26. Exterior ∠ = 30˚ 27. Interior ∠=160˚ 28. Exterior ∠=15˚

Sides = _____ Sides = _____ Sides = _____ Sides = _____

29. Exterior ∠= 8˚ 30. Interior = 171˚ 31. Exterior ∠= 90˚ 32. Interior ∠= 120˚

Sides = _____ Sides = _____ Sides = _____ Sides = _____