Chapter 10 Homework Packet
§10-1

Decide whether the figure is a polygon. If it is, name it by its sides. If it is not, state why not.

1.

2.

3.

4.

5.

6.

Use the number of sides of the traffic sign to tell what kind of polygon it is. Is it *equilateral, equiangular, regular,* or *none of these*?

7.

8.

9.

10.

Draw a figure that fits the description.

11. A convex heptagon

12. A concave nonagon

13. An equilateral hexagon that is not equiangular

14. An equiangular polygon that is not equilateral

Find the sum of the measures of the interior angles of the convex polygon.

15. Pentagon

16. Nonagon

17. 13-gon

18. 18-gon

You are given the measure of each interior angle of a regular *n*-gon. Find the value of *n*.
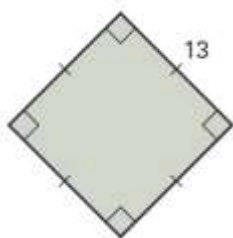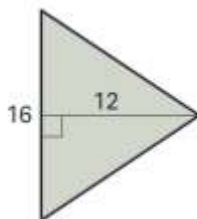
19. 108°

20. $128\frac{4}{7}°$

21. 150°
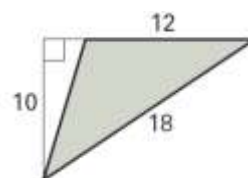
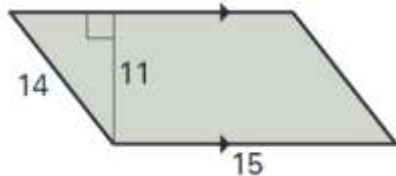22. 162°
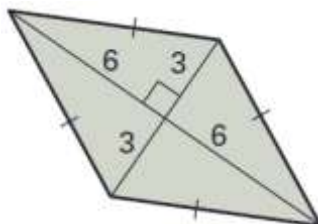
§10-3 & 10-4

Find the area of the polygon.

23.

24.

25.

26.

27.
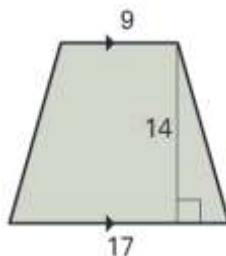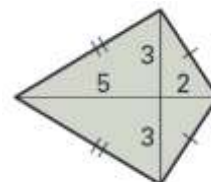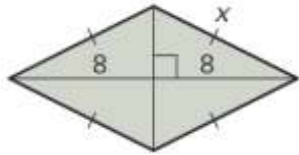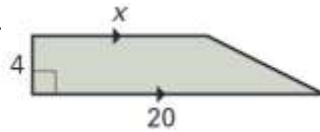
28.
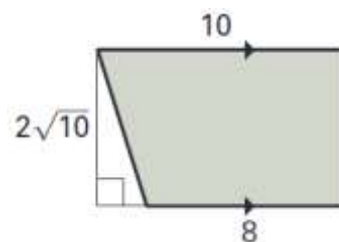
29.
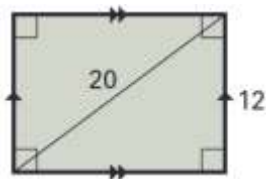
30.

31.

The quadrilateral has an area of 64 square units. Find the value of x.
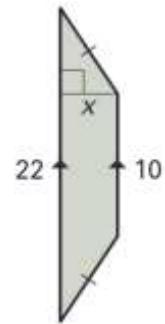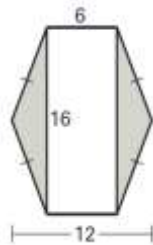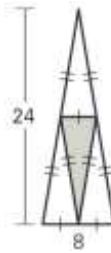
32.

33.

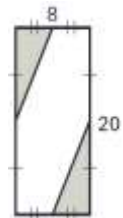34.

Find the area of the unshaded region.
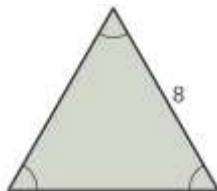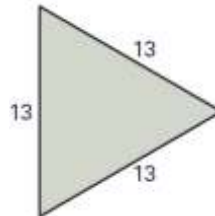
35.

36.

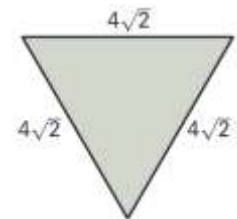37.

§10-5

Find the area of the triangle.

38.

39.

40.

Find the measure of the central angle of the polygon with the given number of sides.
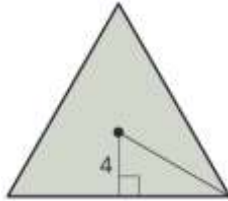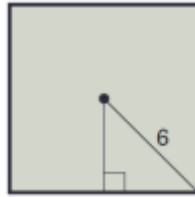
41. 8 sides

42. 10 sides

43. 18 sides

44. 24 sides

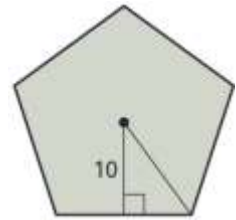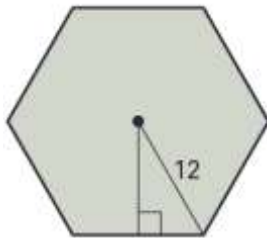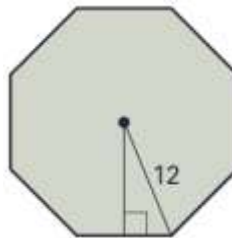*Find the perimeter and area of the regular polygon.*

45.

46.

47.

48.

49.

50.