Sixth Grade: Activity 23 Practice (pg. 301-302)

Lesson 23-1

1. a. rectangle

b. parallelogram

2. a. ON = 5 in.; YN = 7 in.

b. $m \angle N = 112^{\circ}, m \angle O = 68^{\circ}, m \angle Y = 68^{\circ},$

3. 10 m

4. a. always

b. sometimes

c. sometimes

d. never

5. a. 3 ft; 90°

b. 102°; 6 cm

6. If all the sides of the rectangle are the same length, then the rectangle is a square.

7.88°

8. rectangle; x = 45

Lesson 23-2

9. 16.4 m; 16.81 m²

10. 130 ft; 840 ft²

11. 21 in.²

12. 234 m²

13. 116 cm²

14. 19 m

15. 225 in.²

16. 74 ft

Lesson 23-3

17. 90 cm²

18. 109.6 cm²

19. 518 in.²

20. 158.73 in.2

21. 30.5 cm²

22. 4.275 m²

 Answers will vary. Check students' models.

24. 68 in.

25. Answers may vary. You can form rectangles by arranging other polygons in different ways and then use the formula for the area of a rectangle to find the area of the polygon. You can also decompose polygons into rectangles to find the area.

26. Answers may vary. Sample answers:

