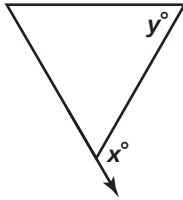# Practice 3-5

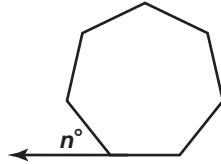**The Polygon Angle-Sum Theorems**

Find the values of the variables for each polygon. Each is a regular polygon.
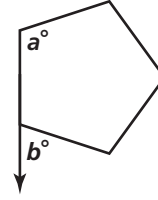
1. $x =$ _____, $y =$ _____
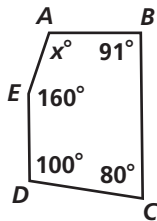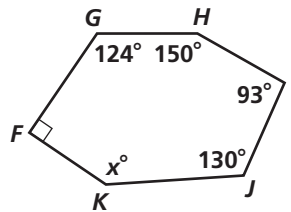

2. $n =$ _____

3. $a =$ _____, $b =$ _____

Find the missing angle measures.

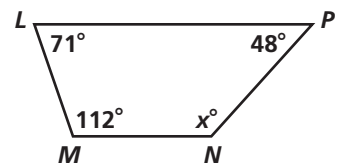**4.** _____

5. _____

6. _____

For a regular 12-sided polygon, find each of the following.

7. the measure of an exterior angle _____

8. the measure of an interior angle _____

The measure of an interior angle of a regular polygon is given. Find the number of sides.

9. 120 _____

10. 108 _____
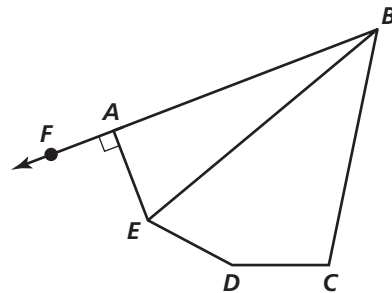
Identify each item in Exercises 11–14 in the figure.

11. quadrilateral _____

12. exterior angle _____

13. pair of supplementary angles _____

14. pentagon _____