

Name \_\_\_\_\_

Date \_\_\_\_\_

**LESSON 11.6**

**Practice B**

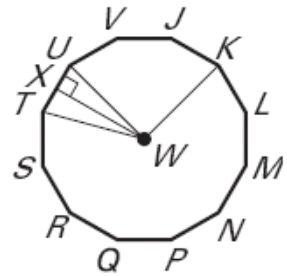
*For use with pages 762–769*

**Find the measure of a central angle of a regular polygon with the given number of sides. Round answers to the nearest tenth of a degree, if necessary.**

1. 20 sides
2. 36 sides
3. 120 sides
4. 23 sides

**Find the given angle measure for the regular dodecagon shown.**

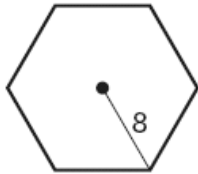
5.  $m\angle TWU$
6.  $m\angle TWX$
7.  $m\angle XUW$
8.  $m\angle TWK$
9.  $m\angle UWK$
10.  $m\angle XWK$



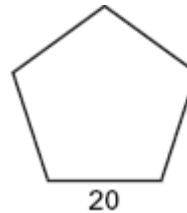
12. A regular hexagon has a diameter 22 inches. What is the length of its apothem? Round your answer to the nearest tenth.
13. A regular octagon has a diameter 8.5 feet. What is the length of its apothem? Round your answer to the nearest tenth.

**Find the perimeter and area of the regular polygon. Round answers to the nearest tenth, if necessary.**

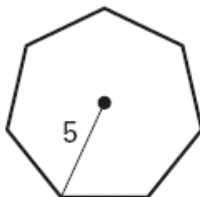
14.



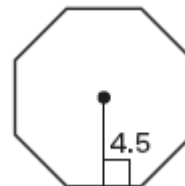
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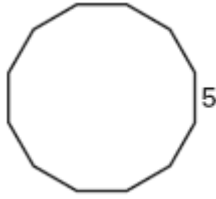
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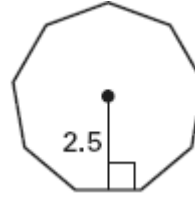
17.



18.



19.



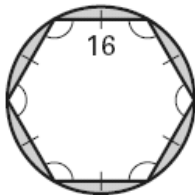
20. What is the area of a regular 24-gon with a side length of 10 inches? Round your answer to the nearest tenth, if necessary.

21. What is the area of a regular 30-gon with a radius of 20 feet? Round your answer to the nearest tenth, if necessary.

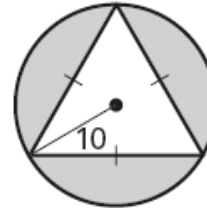
22. Find the area of a regular pentagon inscribed in a circle whose equation is given by  $(x - 4)^2 + (y - 6)^2 = 16$ .

**Find the area of the shaded region. Round answers to the nearest tenth, if necessary**

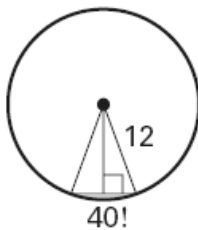
23.



24.



25.



26.

