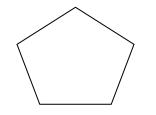
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## When necessary, round to two decimal places.

1. Draw in and label a central angle, a radius, and an apothem of the regular pentagon pictured below.

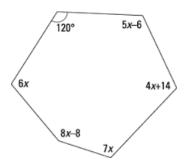


- 2. Find the measure of each central angle in a dodecagon.
- 3. If the apothem of an octagon is 6.4, what is the length of the radius?
- 4. The radius of a hexagon is 20 cm. What is the length of the apothem?

- 5. If each side length in a regular decagon is 8 in., and the apothem is 12.3 in., what is the length of the radius?
- 6. In a regular nonagon the radius is 18mm. (A)What is the length of each side of the nonagon?
  - (B) What is the apothem of the nonagon?

## REVIEW

- 7. Find the sum of the measures of the interior angles of a polygon that has:
  - a. 6 sides \_\_\_\_\_
  - b. 30 sides\_\_\_\_\_
- 8. A convex pentagon has interior angles that measure 60°, 80°, 120°, and 140°. What is the measure of the fifth interior angle?
- 9. The measure of each interior angle of a regular polygon is 140°. How many sides does the polygon have?
- 10. What is the measure of each exterior angle of a dodecagon?
- 11. Solve for x.



12. Solve for x and y.

