Name: $\qquad$

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 18 mm . (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 $\qquad$
b. 30 sides $\qquad$
8. A convex pentagon has interior angles that measure $60^{\circ}, 80^{\circ}, 120^{\circ}$, and $140^{\circ}$. What is the measure of the fifth interior angle?
9. The measure of each interior angle of a regular polygon is $140^{\circ}$. 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 $y$.


A quiz on these topics will be tomorrow, Tuesday April 11.

