CL 10-98. Copy the diagram at right onto your paper. Assume $\overline{AD}$ is tangent to $\odot C$ at D.
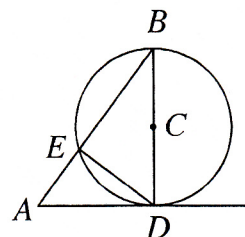

a. If $AD = 9$ and $AB = 15$, what is the area of $\odot C$?

b. If the radius of $\odot C$ is 10 and the $m\overset{\frown}{ED} = 30°$, what is $m\overset{\frown}{EB}$? AD?

c. If $m\overset{\frown}{EB} = 86°$ and if $BC = 7$, find EB.

CL 10-100. Consider the solid represented by the mat plan at right.

| 3	1	0
0	1	1
0	2	3

Front   Right

a. Draw the front, right, and top view of this solid on graph paper.

b. Find the volume and surface area of this solid.

c. If this solid is enlarged by a linear scale factor of 3.5, what will be its new volume and surface area?
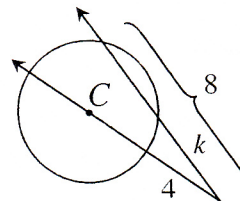
CL 11-108. Use all your circle relationships to solve for the variables in each of the diagrams below. Assume that C is the center of the circle for parts (b) and (c).
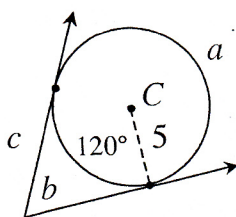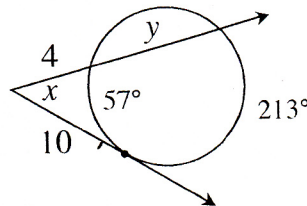
a.
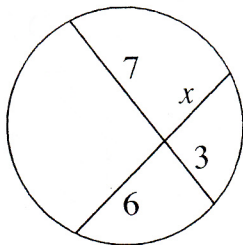
b. The area of $\odot C$ is 25π un^2

c.

d.

CL 11-109. The radius of the moon is approximately 1738 km. Draw a diagram of the moon on your paper.

a. If all the Earth's water were distributed on the surface of the moon, it would be about 33.6 km deep! How much water is on the Earth?

b. If all of this water were to be collected and reshaped into a gigantic spherical drop out in space, what would its radius be?

CL 10-101. Consider the descriptions of the different shapes below. Which shapes <u>must</u> be a parallelogram? If a shape does not have to be a parallelogram, what other shapes could it be?

    a.   A quadrilateral with two pairs of parallel sides.

    b.   A quadrilateral with two pairs of congruent sides.

    c.   A quadrilateral with one pair of sides that is both congruent and parallel.

    d.   A quadrilateral with two diagonals that are perpendicular.
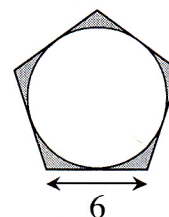
    e.   A quadrilateral with four congruent sides.

CL 10-102. In $\odot C$ at right, $\overline{AB} \cong \overline{DE}$. Prove that $\angle ACB \cong \angle DCE$.
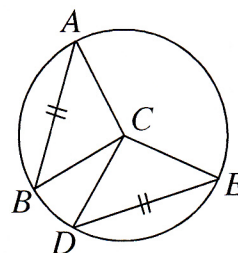
CL 10-103. Find the measure of x in each diagram below. Assume each polygon is regular.

    a.   b.   c.
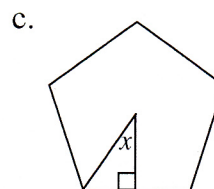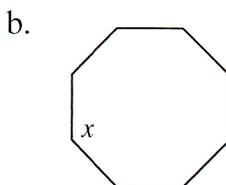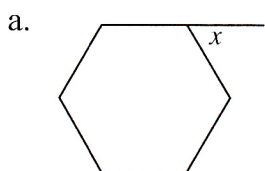
CL 10-104. The circle at right is inscribed in a regular pentagon. Find the area of the shaded region.

CL 10-105. On graph paper, graph the equation $x^2 + y^2 = 100$.

    a.   What are the values of x when $y = 8$? Show how you know.

    b.   What are the values of y when $x = 11$? Show how you know.

CL 10-106. Check your answers using the table at the end of the closure section. Which problems do you feel confident about? Which problems were hard? Use the table to make a list of topics you need help on and a list of topics you need to practice more.