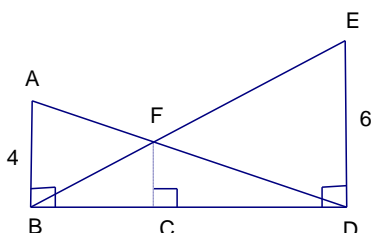
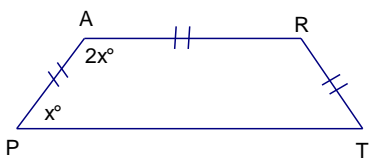
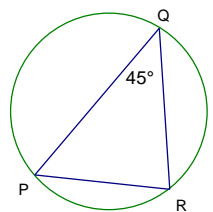
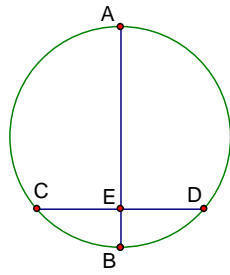
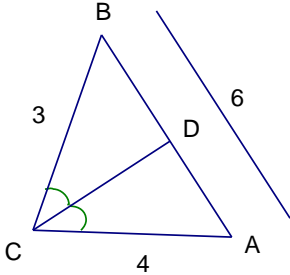
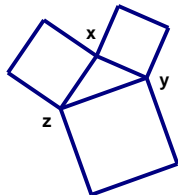
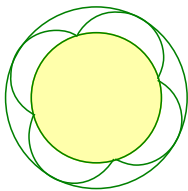
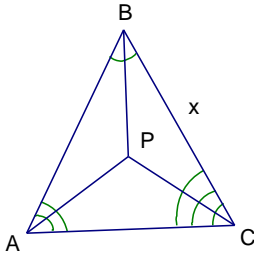


Practice: A triangle with sides 5, 3, & 4 is circumscribed by a circle. The circle has area ____?		$25\pi/4$
1.1 How long is \overline{FC} ?		$\frac{12}{5}$
1.2 The trapezoid PART has $m\angle P = x^\circ$ and $m\angle A = 2x^\circ$. The three congruent sides have length m . Find the length of the median in terms of m .		$\frac{3m}{2}$
1.3 An 8-inch diameter pizza is cut into 3 equal slices. A 10-inch diameter pizza is cut into 4 equal slices. A 12-inch diameter pizza is cut into 6 equal slices. A 14-inch diameter pizza is cut into 8 equal slices. From which diameter pizza would you take one slice if you want as much pizza as possible?		10 inch
1.4 If the numerical value of the area of a square plus two times the numerical value of its perimeter is equal to 20, what is the length of one side of the square?		2
1.5 Points P, Q, and R lie along the circumference of a circle of radius 4, as shown here. The measure of $\angle PQR = 45^\circ$. Find the length of chord PR.		$4\sqrt{2}$
2.1 \overline{AB} is a diameter of a circle of radius 1 unit. \overline{CD} is a chord perpendicular to \overline{AB} that cuts \overline{AB} at E. If the arc CAD is $\frac{2}{3}$ of the circumference of the circle, what is the length of the \overline{AE} ?		$\frac{3}{2}$
2.2 If the vertices of a square A are the midpoints of the sides of square B, then what is the ratio of the area of square A to square B?		$\frac{1}{2}$
2.3 What is the total number of diagonals in an icosagon?		170
2.4 If the lengths of two sides of a right triangle are 3 and 4, what is the least possible length of the third side?		$\sqrt{7}$

2.5 What is the length of segment AD?		$\frac{24}{7}$
3.1 If the area of a circular disc inscribed in a square is $36\pi \text{ cm}^2$, what is the area of the square?		144 cm^2
3.2 Suppose two co-planar circles C_1 and C_2 have no points in common. Determine all possibilities for the number of lines tangent to both C_1 and C_2 .		0 or exactly 4
3.3 What is the length of the shortest altitude of a triangle whose sides measure 5, 12, 13?		$\frac{60}{13}$
3.4 The ratio of an interior angle to an exterior angle of a certain regular polygon is 5:1. Find the sum of the interior angles of the polygon in degrees.		1800°
3.5 The diagram shows three squares, each of which shares one side of a triangle. What is the sum of angles x, y, and z?		360°
4.1 What is the area enclosed by a regular hexagon with side length $2\sqrt{7}$?		$42\sqrt{3}$
4.2 The diagram shows two concentric circles and four equal semicircular arcs. The area of the inner (shaded) circle is 1. What is the area enclosed by the outer circle?		2
4.3 Compute the distance from the center of a circle of radius 3 inches to a chord of length 5 inches that is in the same circle.		$\frac{\sqrt{11}}{2}$
4.4 ABC is an equilateral triangle. Find the length of \overline{AP} in terms of x.		$\frac{x\sqrt{3}}{3}$

<p>4.5 A regular hexagon is inscribed in a circle of radius 6. What is the area enclosed by the hexagon?</p>	<p>$54\sqrt{3}$</p>
<p>E1 What is the measure of x in the trapezoid?</p>	<div data-bbox="894 327 1317 548"> </div> <p>5</p>
<p>E2 What is the surface area of a regular tetrahedron that has side lengths of 7?</p>	<p>$49\sqrt{3}$</p>