CP Geometry: Test #6 (Area / Perimeter)
Wednesday, May 12, 2010 -- 300 points

I. Terms (Not too many to know how to define here)
- Know how to define
  - Center of a regular polygon ◊
  - Apothem ◊
- Know what things are (will not need to define) [like sectors, segments, kites, etc...]

II. Previous Results that we use to find areas
- Pythagorean Theorem / Triples
- 45-45-90 and 30-60-90 special right triangles
- Trig Ratios
- Simplifying radicals / combining radicals appropriately

III Right Triangles
- Pythagorean Theorem
  - ***<u>You will be asked to prove this one way for 30 points</u>.***
  - You will be given a card stock right triangle cut-out to draw the figure you will use to prove this theorem (That is, I will **NOT** provide figures for you.)
- How to tell if three side lengths form an acute, right, or obtuse triangle

IV. Area and Perimeter of Figures **FORMULAS WILL <u>NOT</u> BE PROVIDED!!!!**
- Rectangles / Squares / Chunk figures apart
- Triangles
- Parallelograms (Base and Height must be perpendicular - trig?)
- Rhombuses
- Kites
- Trapezoids
- Circles
  - Arc Length
  - Sectors
  - Segments
- Regular Polygons
  - Hexagons and Octagons in EXACT form
  - Other Regular Polygons With Decimals
- "Funky" regions - watch for how to chunk figures apart
- Probability
  - Be able to calculate the probability a randomly thrown dart would land in the shaded region of a figure. (Figures appearing complicated too.)

Watch out for when you are asked for EXACT form!!! You need simplified fractions, square roots, and π symbols in this case.

V. Applications - Be ready for any...
- "How many times would a tire rotate..."
- Best deal with pizzas
- Any other circle applications we discuss Monday

<u>THIS IS A HUGE GRADE FOR THE 3RD GRADING PERIOD!!!</u>