Grade: 8 Math		**Mastery Check**
Benchmark #: 8.1.4.A1a-c		**3**
State Language: The student generates and/or solves one-and two-step real-world problems using computational procedures and mathematical concepts: A) rational numbers B) the irrational number pi as an approximation C) applications of percents	**Student Friendly Language**: • Students will solve Real-World problems involving fractions, decimals and percents. • Students will solve area and perimeter of a rectangle. • Students will solve area and circumference of a circle using pi. • Students will work any percent problem.	
Concept (Students will know): **a)**computation with rational numbers Use Area & Perimeter formulas for Rectangles finding a missing side. Converting fractions and decimals **b)** understand (pi) Find Area & circumference of circles. Find the missing piece of a circle (radius/diameter) **c)** Be able to figure interest, sales discount, sales price and sales tax using percents. **d)** Solve any problem involving percents.	**Skills** (Students will do): **a)** Use all 4 operations for Rational Numbers (fractions and decimals) •Convert between fractions, decimals and percents. •Uses equivalent representations with rational numbers. **b)** Use Pi to find circumference and area of a circle. •Find the missing piece of a circle (radius/diameter) **c)** Be able to figure interest, sales & price discount and sales tax, and percent of sales. •Be able to apply the formula for interest. •Be able to use the percent proportions.	**DOK Level:** **2.5**
Big Ideas: 1)Be able to work real world problems involving multi step problems with Area, Perimeter of a rectangle and circumference/area of a circle and finding missing sides and parts. 2)Work real world problems involving all kinds of percents, discount, sales price, sales tax and interest.		
Core Materials	**Supplemental Materials**	
Teaching Strategies:		
Mastery Check Items:		