



Middle School Summer Math Program

Eighth Grade students should know the formulas for the perimeter and area of triangles and rectangles, the circumference and area of circles, the commutative, associative, and distributive properties, and order of operations. They should be proficient in working with positive and negative numbers.

Middle School students are expected to complete a summer math log of learning experiences. Students should select at least one activity from each category to review concepts, improve computation, and find a challenge. Students are encouraged to spend at least 400 minutes during the summer practicing their math skills.

Categories and suggestions:

- I. Play games with other people. Board games such as *Monopoly*, checkers and chess require logic and/or math skills. *Set*, *24*, *Sudoku*, *Ken Ken*, and many card games require strategy or counting.
- II. Practice with flashcards, computer games, and worksheets to increase speed and accuracy in working with basic facts.
- III. Worksheets, computer games, and word problems that require students to add, subtract, multiply, and divide without a calculator provide needed practice. Include operations with fractions and decimals.
- IV. Real life situations often require math. Measuring and adjusting recipes, figuring a checkbook, determining a trip's costs and mileage are all opportunities to use math. Compare the costs of driving or flying for a vacation trip. Graph swim times or the price of gasoline each week. Determine tips, change and taxes on purchases. Turn in any charts, graphs, or work related to a real life activity.

Below are a list of websites that offer practice, lessons, and challenges. Students should choose a level that will support learning. Increase the level if there are never errors. Decrease the level if it is too difficult.

<http://aaamath.com/> Decimal subtraction (horizontal)
 Decimal division
 Fractions
 Ratio, expressions, exponents, integers, geometry, properties

<http://www.mathgoodies.com/games/>

Fractions, integers, pre-algebra, order of operations, percents, probability, circles

<http://coolmath4kids.com/>

Long division lesson, *Number Monster* for long division, many other topics Look for <http://www.coolmath-games.com/lemonade/index.html>

<http://mathisfun.com/>

<http://mathplayground.com/>

<http://figurethis.org/index.html> Story problems and brainteasers

<http://mathforum.org/pows/> Problem of the week

http://pbskids.org/cyberchase/math_magic/

<http://www.funbrain.com/>

There are many other excellent sites.

Students who have not mastered specific skills may benefit from work in a grade level workbook which may be purchased from a bookstore.

The Tri-C summer workbooks may be ordered from Summerskills.com.

Copies of the current textbook may be borrowed during the summer.

