

Summer Math Assignment Incoming Advanced 8th Grade

Dear Parents of OLA Middle School Parents,

We will continue to use the interactive math program, IXL. Since the summer learning loss is still something we are concerned with, we will be assigning a minimum number of hours that are expected of your child. We will be placing an emphasis on specific skills that your child should be solid with before we start our school year in the fall! Over the summer, students are expected to complete **5 hours** of math skills practice within IXL. Our hope is that the review will take place over the entire summer rather than during the last few days before we return to school. Ideally, your child will be working on IXL a couple of times a week over the course of ten weeks. **All work should be completed between June 15th and August 31st. Work completed after this deadline, although great, WILL NOT be counted towards your grade.**

The summer assignment will be graded based on the amount of time spent actively working on IXL and it will be weighted as $\frac{1}{2}$ of a test -- 50 points. Thus, each $\frac{1}{2}$ hour fully completed is worth 5 points. This will be accompanied by a test at the beginning of the year based only on those most essential concepts that your child should be solid with to start the year!

Any student who does more than 5 hours of work can receive 1 extra credit point per hour, with a max-out at 10 total hours of IXL work. We want you to enjoy the nice weather, too!

If you have any questions, please feel free to contact me:

Patricia.fothergill@ourladysacademy.org

Thank you for your support!

Patty Fothergill

Dear Students,

This summer you need to practice AT LEAST **five** hours of math skills on IXL. For each section listed below, you should reach a SMART SCORE of at least 90. To start, log-in to your IXL account using the username and password you used during the school year. Choose the **8th** grade tab, select a skill from the checklist attached and start answering questions. If you answer incorrectly, you will be given an explanation of why your answer is wrong. Once you understand it, click on “Got it” and you will be given another question.

The skills you are assigned will be needed in the course you are entering in the fall. If you encounter an assigned skill that you don't remember, or think that you have not learned, you can always view a tutorial at www.khanacademy.org as well as other websites you find helpful. It can also be helpful to try the skill one grade level down, to help master the building blocks necessary to master the skill at the next level!

If you complete the material in your grade level before you have spent 5 hours working, please either go back to the sections you had the most difficulty with and try to beat your previous score OR challenge yourself by finding the corresponding skill in the next grade level and attempt those problems!

The summer work will be graded as 5 points per $\frac{1}{2}$ hour of work, making it worth a total of 50 points for the 5 hours you need to work. The dates are from June 15th through **August 31st**. THIS IS NOT THE LAST DAY OF SUMMER, SO DON'T WAIT UNTIL THE END TO GET YOUR WORK DONE. Late work, while great, won't count toward your grade. The skills I include are the ones I suggest you spend the majority of your time on. When we get back to school there will be an assessment on those topics, and it will be worth 50 points. This makes the total score one test grade to start the year!

If you have any questions, email me! My email is:
patricia.fothergill@ourladyacademy.org I will answer within a day or two.

Have a great summer!

Mrs. Fothergill

Operations with integers

- o Add and subtract three or more integers
- o Multiply and divide integers

Operations with rational numbers

- o Add and subtract rational numbers
- o Multiply and divide rational numbers

Exponents and roots

- o Exponents with negative bases
- o Multiplication and division with exponents
- o Evaluate expressions using properties of exponents

Percents

- o Find what percent one number is of another
- o Percent of change

Coordinate plane

- o Coordinate plane review
- o Quadrants and axes

Pythagorean theorem

- o Pythagorean theorem: find the perimeter
- o Converse of the Pythagorean theorem: is it a right triangle?

Geometric measurement

- o Area between two shapes
- o Volume of cubes, prisms, and pyramids
- o Surface area of cubes, prisms, and pyramids

Expressions and properties

- o Identify terms and coefficients
- o Multiply using the distributive property
- o Add and subtract like terms

One-variable equations

- o Solve two-step equations
- o Solve multi-step equations
- o Solve equations involving like terms

One-variable inequalities

- o Solve one-step inequalities
- o Graph solutions to one-step inequalities

Data and graphs

- o Interpret stem-and-leaf plots
- o Interpret box-and-whisker plots
- o Choose the best type of graph

Statistics

- o Identify an outlier and describe the effect of removing it
- o Identify representative, random, and biased samples

Probability

- o Compound events: find the number of outcomes
- o Probability of independent and dependent events
- o Permutations
- o Counting principle