Incoming 8th Grade Summer Math "Packet"
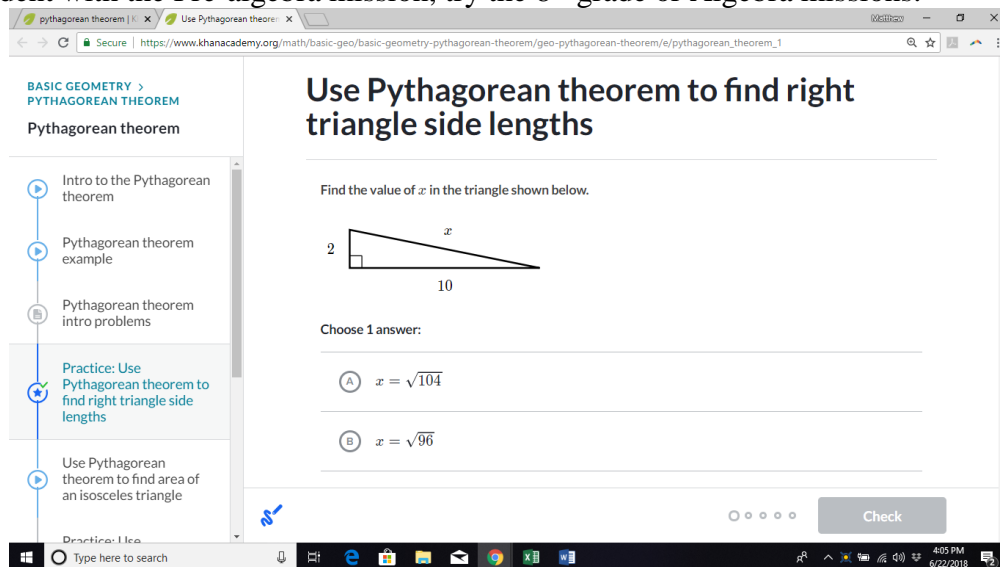
Happy Summer Break!

The Incoming 8th Grade Math "Packet" is an expectation of proficiency in certain skills which will help you immensely in 8th Grade Mathematics and beyond. These are skills which have been taught before (possibly many times) and will be ASSUMED that you are proficient with them.

- Add, subtract, multiply, and divide whole numbers, fractions, decimals, and integers
- Plotting points on a coordinate grid
- Converting amongst fractions, decimals, and percents
- Ratios, rates, proportions
- Order of Operations (PEMDAS)
- Area, perimeter, circumference, and volume of basic geometric shapes and figures (rectangles, triangles, parallelograms, circles, prisms, cylinders)
- One-step equations, two-step equations, and combining like terms
- Perfect square roots
- Pythagorean Theorem
- Graph linear equations (Accelerated only)
- Simplify square roots (Accelerated only)

There will be an assessment covering many of these topics early in the schoolyear. One amazing resource which can help with proficiencies is **khanacademy.org.** It is a free website with thousands of short videos and hundreds of different Exercise sets for math skills. Students can create free accounts through a parent account or with their own email. Instructions on how to start your own account is on the 3rd page.

Recommended exercises:
To begin with, search for any exercises listed above. Your best bet is to earn at least 50% (go for 100%!) on the Pre-algebra mission (see next page for starting the Pre-algebra mission). If you are confident with the Pre-algebra mission, try the 8th grade or Algebra missions.

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IT IS MORE IMPORTANT TO ANSWER THE QUESTION CORRECTLY THAN IT IS TO FINISH THE EXERCISE SET QUICKLY!

If you get stuck on an exercise set, look at the left side of the screen. There should be several video topics there to review (if necessary). There are also hints for each question as well.

There are also badges that students earn by quickly answering questions correctly, perseverance, watching videos, etc. See how many badges you can earn!

Pre-algebra Mission:

- Search pre-algebra math in the search bar
- Click on the link "pre-algebra math | Khan Academy"
- Click "Mission"
- Start the Mission warm-up and use this page to work on the pre-algebra mission

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Students may have an account through a parent's account by creating a child account (multiple child accounts can be created with one parent account), or students may have their own account.

CREATING AN ACCOUNT

If neither you nor your child has a khanacademy.org account already in existence.
Go to khanacademy.org
In the middle of the page underneath the "Sign in with Google" bar, there are 3 options: "sign up with email," "Teachers, start here," and "Parents, start here". Choose either "sign up with email," or "Parents, start here."
IF YOU CHOOSE "SIGN UP WITH EMAIL," put in your (or your child's) First name, last name, email address, and birthdate.
IF YOU CHOOSE "PARENTS, START HERE," you can sign up using google, facebook (not recommended), or another email with "Or sign up using email." Input the proper information.

CREATING A CHILD'S ACCOUNT

If a parent has a khanacademy.org account OR just created one using the above steps.

- Sign in to your account.
- On the top left corner should be a link that says "Coach." Click it.
- Click on "Child Accounts" link on the left side.
- Click the "Create Child Account" button.
- Fill in the information needed.
  - Please note that the child's password can only be changed by you.

The benefit of creating a child's account through your own is you have access to see your child's progress in the skill sets.

LINKING YOUR ACCOUNT

If a student has his/her own account and has yet to linked it to his/her parent.

1) Sign in to your account.
2) Click on your name on the top right side.
3) Highlight and click your name again from the drop down menu.
4) Click on "Coaches" on the left side of the screen. It is the last link on the left side.
5) Type in your parent's email (used for the parent account) as the coach's ID and press the button to add your parent as the coach.
6) ALTERNATIVELY: To join the "Summer Packet 2019" Class on khanacademy, enter the following code for the coach's ID: ZPM9TP48. Mr. Dalzell will be able to see the progression as well.

Already existing usernames can be used IF the username can identify the student without ambiguity