

Hello! I hope that you all enjoy your summer and refresh yourselves for your junior year. I know that summer break always gives me the chance to reenergize for the next school year. To those of you whom I have not yet met, I am excited to get to know you this year. We have a lot of new mathematics to learn this year, and this assignment should help us to be able to get right to it when school begins in the fall.

This course follows the *International Baccalaureate Math Studies Standard Level* syllabus. Topics include number theory and algebra, descriptive statistics, logic, sets and probability, statistical applications, geometry and trigonometry, mathematical models, and an introduction to calculus. Math Studies concentrates on mathematics that can be applied to contexts related to other subject areas and real world topics. It is important that the content on this summer assignment be understood before the start of the IB Math Studies course. All topics here are considered *Presumed Knowledge* and could be used on the IB exam.

What does *Presumed Knowledge* mean? It means that the content in this assignment is math that you should already know how to do. The goal of this summer work is to ensure that you have maintained mastery of these skills. If there are concepts that give you difficulties, you are responsible for seeking help. You may choose to form study groups, use resources such as *khanacademy.org*, use books, or contact me via email or *Remind*. This work **MUST** be completed before you return in order to get full credit. Completion of this work will be worth 100 points. Work that is completed after August 22 will result in a loss of 10 points per day. When we return to school, there will also be a quiz over the material within the first week. Come prepared to ask questions over any concepts that you were unable to master.

In this course, you will be using a Texas Instrument (TI-84plus) graphing calculator. There is a class set available for use during class time, but these cannot be checked out. Often times, you will need a calculator to use at home. It is strongly recommended that you purchase a calculator of your own since they are required for the IB exam. As these calculators run from \$90-\$120, some families find that purchasing is not a possibility. There is now another free option if you have an Android device. There is a TI-84 Graphing Calculator APP called Wabbitemu. If you are unable to install the app or purchase a calculator, please see me privately or email me so that we can discuss other options.

Attached you will find the assignment, good luck!

Summer Checklist

- Sign up for *Remind* (**Do this TODAY!**)
- Download the Wabbitemu App
- Sign up for Khan Academy
- Begin Khan Academy work after taking a week off.

Instructions for all of these follow on the subsequent pages.

Instructions for Joining Remind

On your cell phone, text the following number and write the message in the text box.

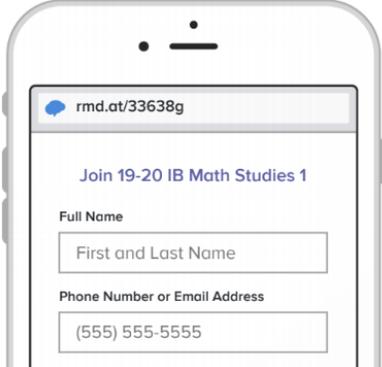
Pick a way to receive messages for **19-20 IB Math Studies 1**:

A If you have a smartphone, get push notifications.

On your iPhone or Android phone, open your web browser and go to the following link:

rmd.at/33638g

Follow the instructions to sign up for Remind. You'll be prompted to download the mobile app.



B If you don't have a smartphone, get text notifications.

Text the message [@33638g](https://t.me/33638g) to the number **81010**.

If you're having trouble with **81010**, try texting [@33638g](https://t.me/33638g) to **(303) 990-8273**.

* Standard text message rates apply.



Don't have a mobile phone? Go to rmd.at/33638g on a desktop computer to sign up for email notifications.

Instructions for Installing the Wabbitemu



- 1) Search for Wabbitemu on the PLAY store or on the Amazon App Store
- 2) **Install**
- 3) **Open**
- 4) Choose **“Help me create a ROM using open source software”**
- 5) Click **NEXT** at bottom of screen (this button is kind of hard to see)
- 6) Choose **TI-84 Plus SE**
- 7) Click **NEXT**
- 8) Choose **“I'd like to download one”**
- 9) Click **FINISH**

Yay!!! You are all set to turn on and use your TI 84 calculator!!

Instructions for Joining Khan Academy




How to join your teacher's Khan Academy class

1. Sign up at khanacademy.org (or log in if you already have an account).
2. Visit khanacademy.org/coaches (the "Coaches" tab in your profile).
3. In the "Add a coach" field, enter the class code.
Class code: VY59KJW4
4. You're set. Now click **Home** to start learning!

Khan Academy Work Checklist

- 1) You **MUST** follow the instructions above in order to get credit for your work. Don't work without signing in and adding me as your coach using the class code above.
- 2) Search for Algebra 1. All of the work that you will complete in Khan Academy will be found here.
- 3) The topics that you will work on are:
 - Algebra Foundations
 - Solving Equations
 - Functions
- 4) Below is an example of what you should see when you choose a topic. Click **Get Started**. If you choose **Overview** you can watch videos to learn. If you feel ready just go straight to **Practice**. If you struggle, you can get hints or watch videos.

 Up next for you:
Algebra foundations 0/1500 Mastery points

Overview and history of algebra	Dependent & independent variables
Introduction to variables	Combining like terms
Substitution and evaluating expressions	Introduction to equivalent algebraic expressions
Evaluating expressions word problems	Interpreting linear expressions
Writing algebraic expressions introduction	Division by zero

[Get started](#)

- 5) Repeat this process to complete each topic.