

# Prepare for Year 12 Maths: Summer Work

## Task A : Research

Find out about the use of the **discriminant** in solving quadratic equations

- What is it?
- Where does it appear in the quadratic formula?
- How does it help to explain how many solutions the quadratic equation has?
- How does it help to explain what the graph looks like?

## Task B: Integral Maths Activities and Assessments

By the end of this week you should have an account set up for you (if not, email me [kshare@presdales.herts.sch.uk](mailto:kshare@presdales.herts.sch.uk))

Website: <https://integralmaths.org/>

Username is

2761T- (notice the dash) followed by your first initial (of your official name) and then surname (NO spaces)

Password is

The same as the Username

(which you will change, so make it something you will remember)

There you will find 7 sections of work to do - lots of information via video and some interactive parts - and an Assessment for each one that you must complete.

- Integers
- Geometry
- Surds and Indices
- Coordinate geometry
- Algebraic manipulation
- Trigonometry
- Completing the square

## Task C: Exam Question Booklet

We have set this so that we can see your written mathematical solutions  
- please show all your working for these questions and return this on  
your first maths lesson

## Task D: Problem Solving

Try to fill in some of the boxes on the two-way table and bring this along  
to your first maths lesson

## Task E: Getting to know your new calculator!

Go through the PowerPoint to familiarise yourself with your new  
calculator.

There is a lot of new A level information here - just look at the topic  
areas that you already understand from GCSE

**YOU WILL BE GIVEN A BOOKLET FOR TASK C BUT  
EVERYTHING ELSE YOU WILL GET FROM THE  
SCHOOL WEBSITE**