## Generation Z

As part of the first social generation to have grown up with access to the Internet and portable digital technology such as cell phones from a young age, you are members of Generation Z or 'Zoomers'. During this activity you will apply any part of **trigonometric ratios** & **Pythagorean' theorem**, in two dimensions. You will create a **YouTube video** on pythagoras or trigonometry theorems to 'teach' an online audience.



Using correct formula with working steps	You have demonstrated a limited ability to apply formula	You have worked on real life example for pythagoras theorem and created an informative video	You have used two practical scenarios to apply trig ratio to find unknown side and an unknown angle to create a video	You have explained angle of elevation and angle of depression in a practical situation in your video
Identifying sides and angles	You have attempted to find some simple solutions to find unknown lengths of a right angle triangle	You have found simple unknown lengths of a right angle triangle	You have applied the knowledge of formulas to find unknown lengths and unknown angles of a right angle triangle	You have applied right-angle triangle formula accurately, clearly showing all steps in solving trigonometry problems
Time Management	You have not submitted your assessment	You have not submitted your assessment by the due date	You have submitted your assessment by the due date	You have submitted your assessment by the due date
Overall	WORKING TOWARDS Curriculum expectation	Working AT curriculum expectation	Working ABOVE curriculum expectations	Working BEYOND curriculum expectation

## **Task Instructions**

You will create an educational teaching aid to explain how Pythagoras or Trigonometry works. You will work in a small group to create a detailed educational resource for future students and teachers to use. Please make a YouTube link for your assessment and upload it on Google Classroom. You are expected to use digital tools to present this. Please select any topic from the following list:

- 1. Find the hypotenuse when short sides are given (Pythagoras).
- 2. Find the short side when hypotenuse and a short side is given.
- 3. Identify sides in trigonometry and identify an unknown side.
- 4. Identify an unknown angle.
- 5. Create a clinometer and use it.

**Note:** This is a group assignment for measurements only. Your trigonometry learning is focussed on working. You will prepare a step-by-step video presentation for future Year 10 students to use as a learning guide. You will also be <u>assessing your peers</u> on their work input.

