Small Group Exercise: How many different units will the calculator need

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Activity Kind

Small group exercise

Purpose

The purpose of this exercise is to practice thinking more deeply about the calculator project.

Pre-requisite

Students are expected to have read the papers: Precision V3b and Units of Measure.

Tasking

Students are partitioned in to groups of two to four students. Consider the different groups of units and then how units might actually be needed? (E.g. What are the units for velocity and acceleration which should be important to the MCO mission? It appears that Imperial and Metric measures are needed.)

What equation and what units are required to increase or decrease acceleration? What is the result of multiplying a velocity by a time measure? If you increase acceleration for a period of time, what is the result? If you travel a specific distance in a measured amount of time, how do you compute the result and what units should be used? Express these in equations.

Then as a group, compare the answers and think about what other units might be needed.

Deliverable

Each student is responsible for producing solutions to this exercise and placing those results into their ENB. Do not just provide the answer the group produced if you do not believe it is correct. You may be called to present your solution to the class and explain how it works.

Submission

Each student must produce and submit an ENB each evening (before midnight).