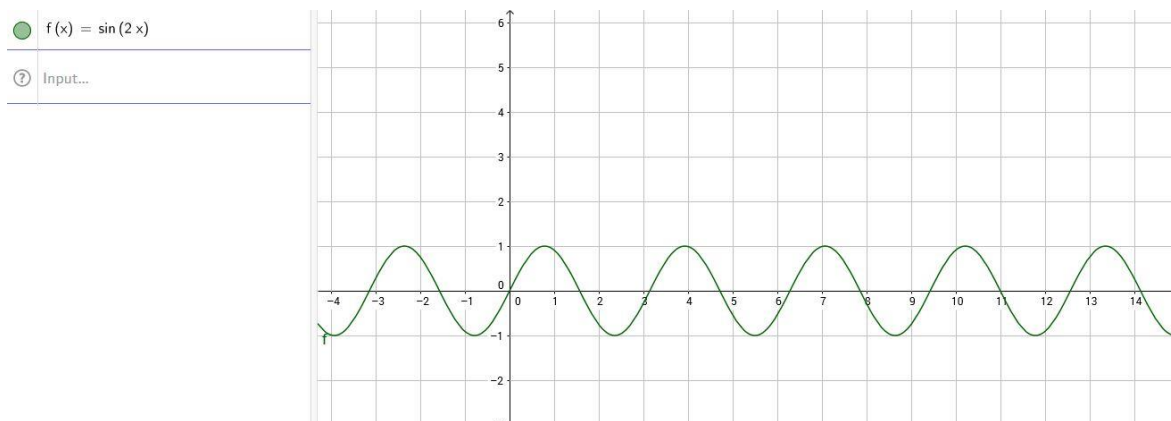


Degrees and Radians

A year 12 class is exploring trigonometric functions using GeoGebra. The teacher asks the students to plot a few graphs using the software. After a few examples, he asks:

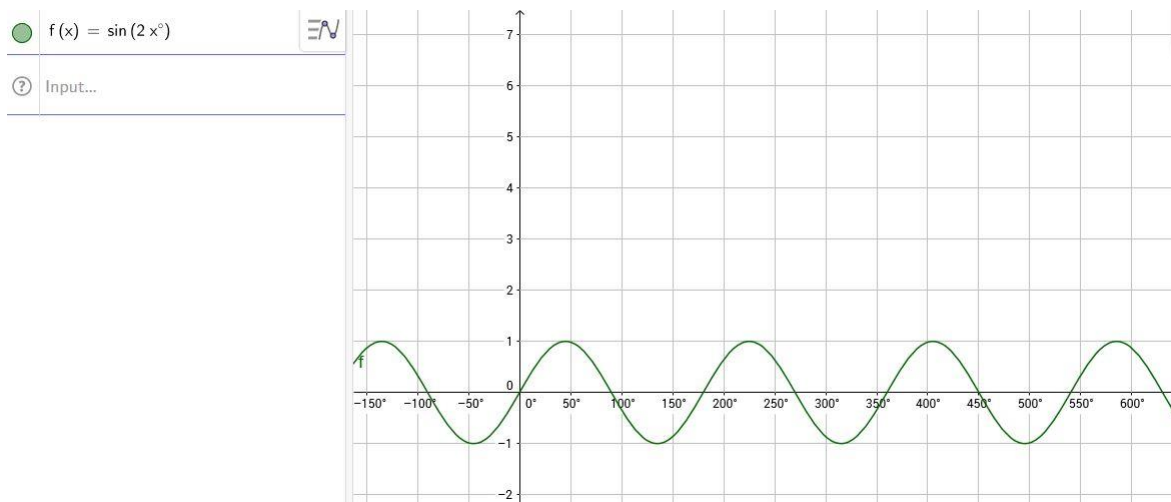
“Can you graph $\sin 2x$ using Geogebra?”

Student A types $f(x) = \sin(2x)$ and produces the following graph:



Student B has also produced a graph but has a question.

Student B: I typed $f(x) = \sin(2x^\circ)$. It seems that it is the same curve but the numbers in the x-axis are different. Why is mine different from yours?



You just heard this exchange between student A and student B.

Questions:

- What are the aims of using this activity in class?
- Do the two graphs differ? If so, how and why?
- How would you respond to the two students and to the whole class?
- How would you use the GeoGebra software, or other, in your responses to the above?