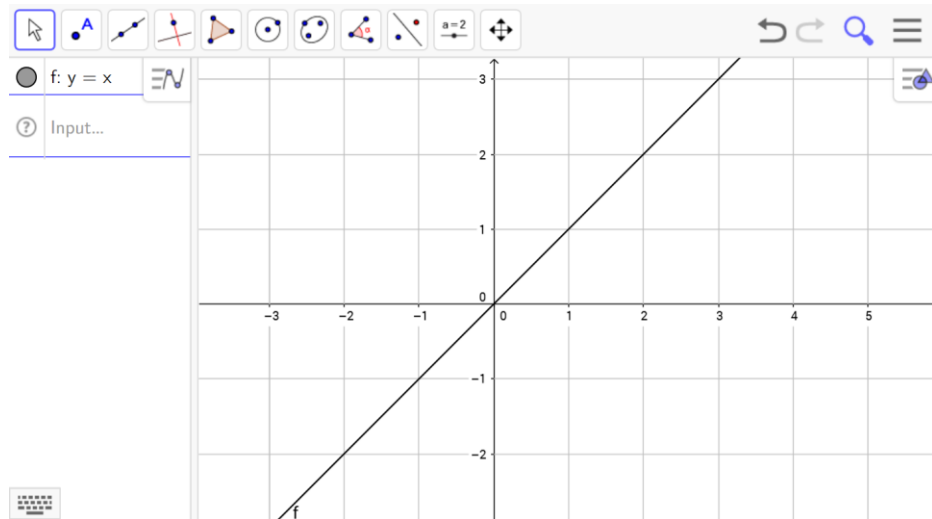


Graph Transformation with GeoGebra

In a Year 9 lesson, students are introduced to graph transformations using GeoGebra. The teacher shows them how to input functions and asks the students to explore these on their own for a while. While walking around the class, she witnesses the following dialogue between student A and student B:

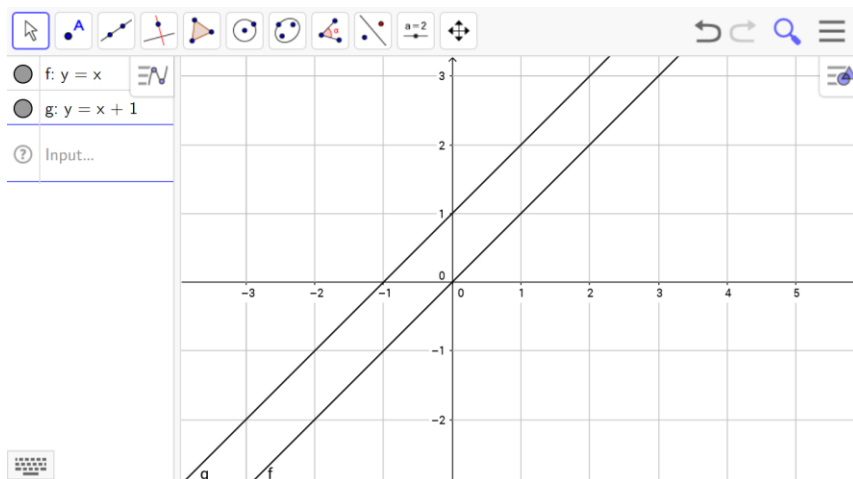
Student A: Hey, Student B, I drew the $y=x$ graph: it's a straight line passing through the centre of the axis.



Student B: Nice! I did that as well. But now ... I've moved it one step to the right.

Student A: Hey, let me try that! Okay, I type: $y=x+1$ and press enter.

It did move! But wait, why did mine go to the left? I typed $+1$, not -1 !



You are the teacher and you just heard this exchange between students A and B.

Questions:

- Why did student A encounter this issue with the graph?
- How would you respond to student A and to the whole class?
- How would you use GeoGebra, or another software, to support your responses to the above?