Interactive Local Maps

Solving Systems of Linear Inequalities

Sample task for STEM and SDGs

Colleen M. Eddy
University of North Texas

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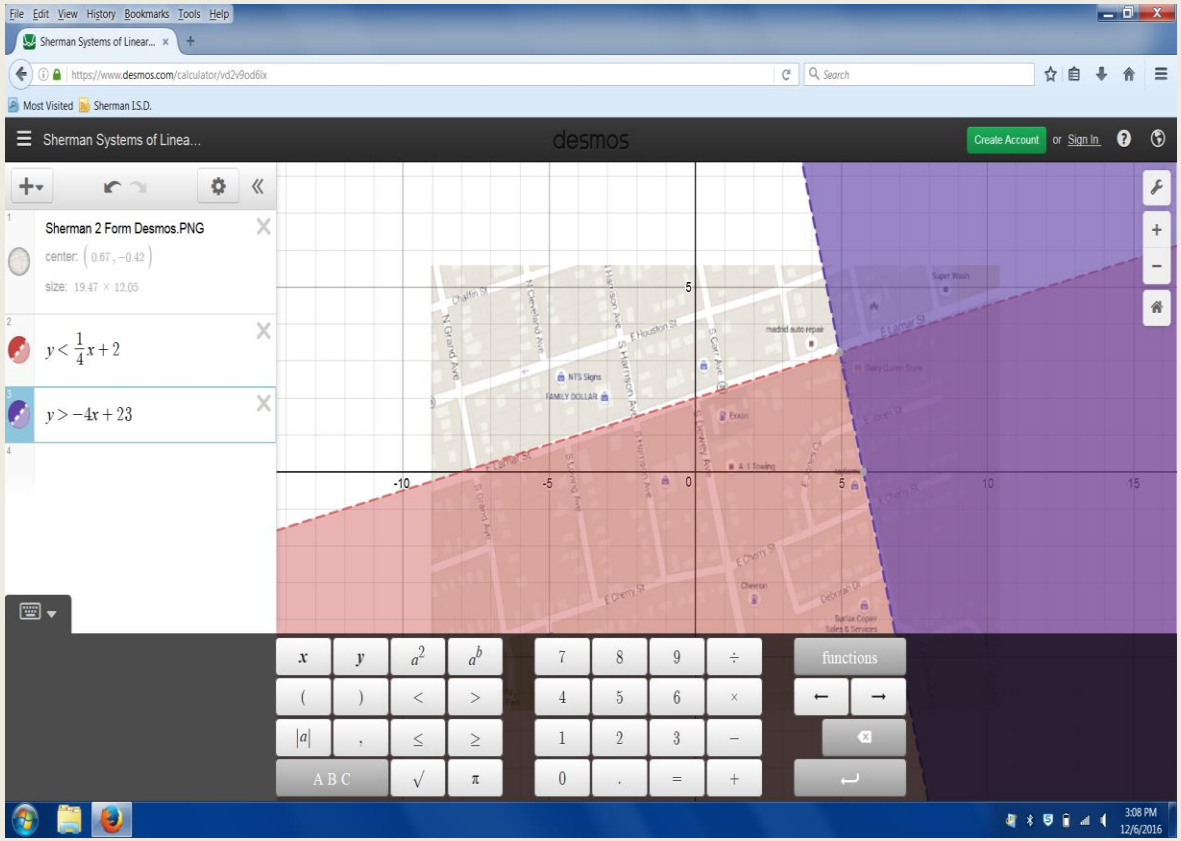
Utilize Local Map

- The teacher provides two clues for students to determine the mystery location on a local map such as
  - I am South of Lamar St.
  - And East of Wanda Dr.
- Students use their knowledge of N, S, E, & W; linear functions; and linear inequalities to plot the clues

Using Desmos

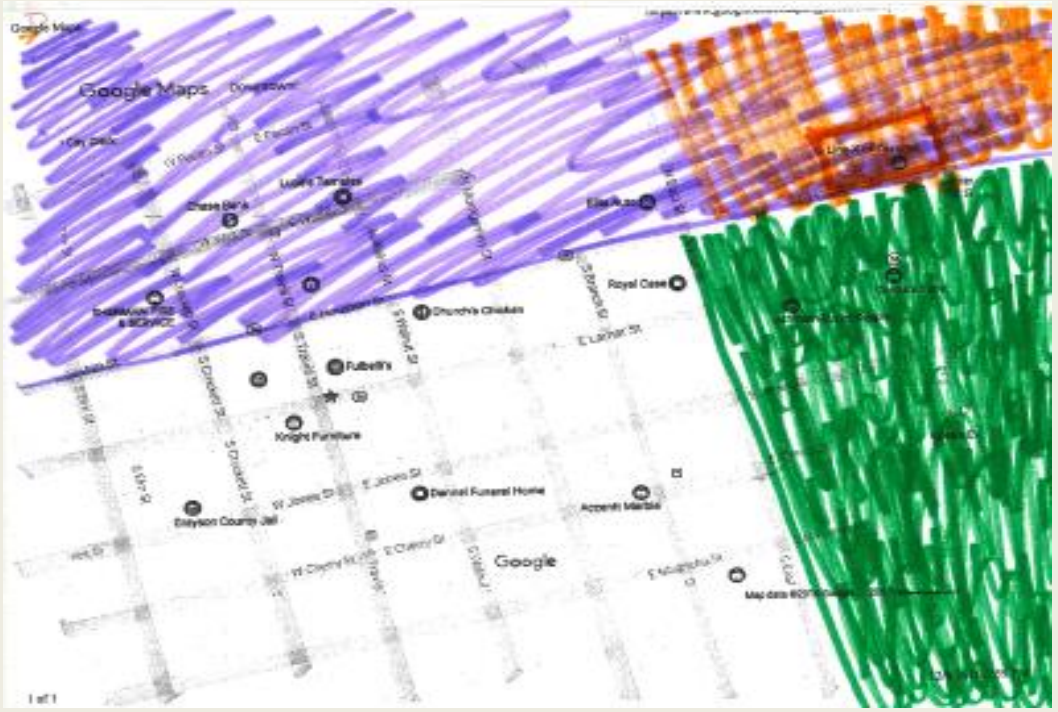
Next, students access the Desmos link given by the teacher with the preloaded local map. Using the same clues the teachers provided, students create the two inequalities that match the clues given by the teacher within the Desomos program.



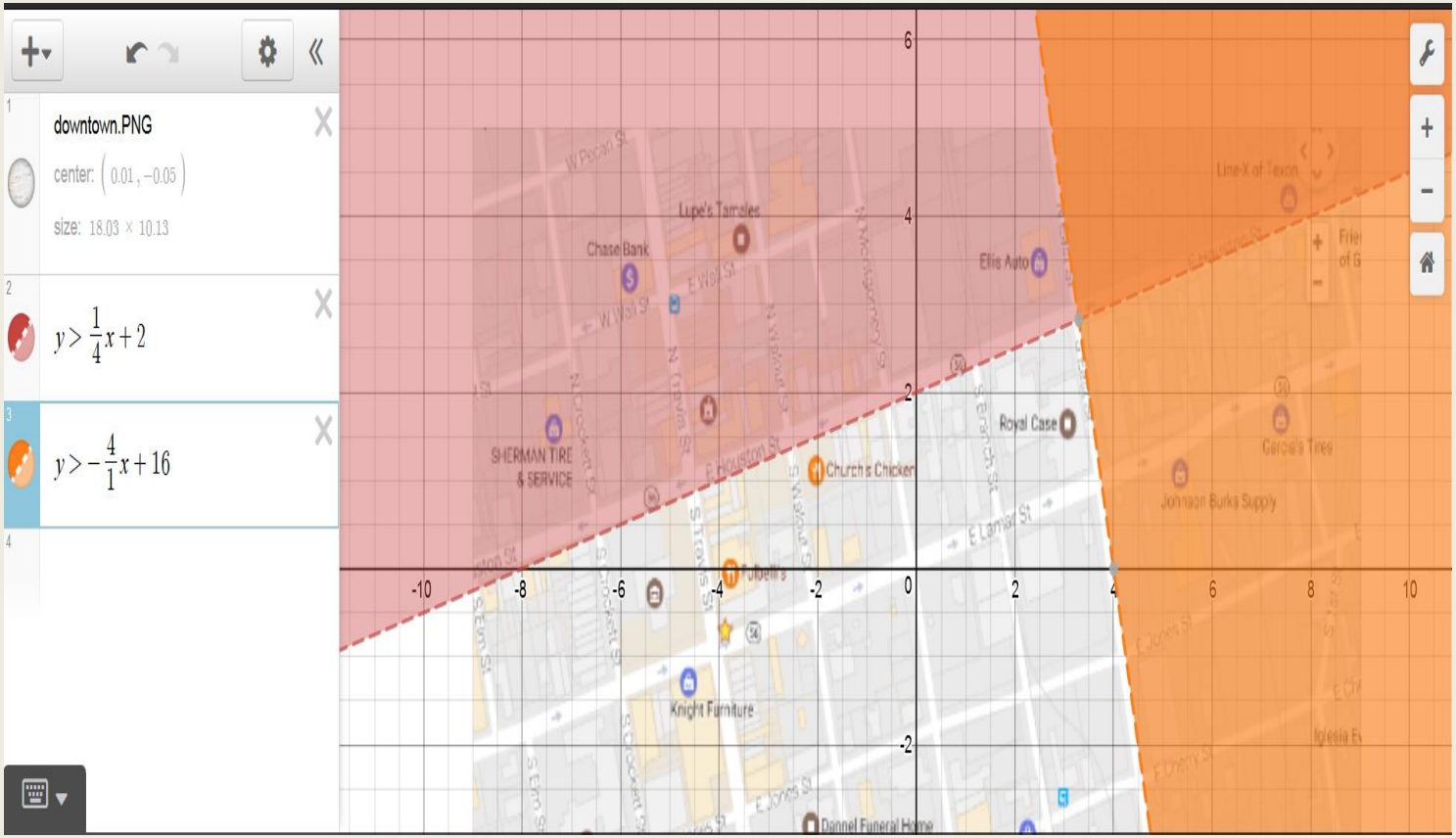
www.desmos.com
This program is free.

Students Create Problems

Students select their own map using Google maps for clues to their mystery location. Their partner then graphs according to the clues.



Students then graph the clues using inequalities to match the clues given by their partner.



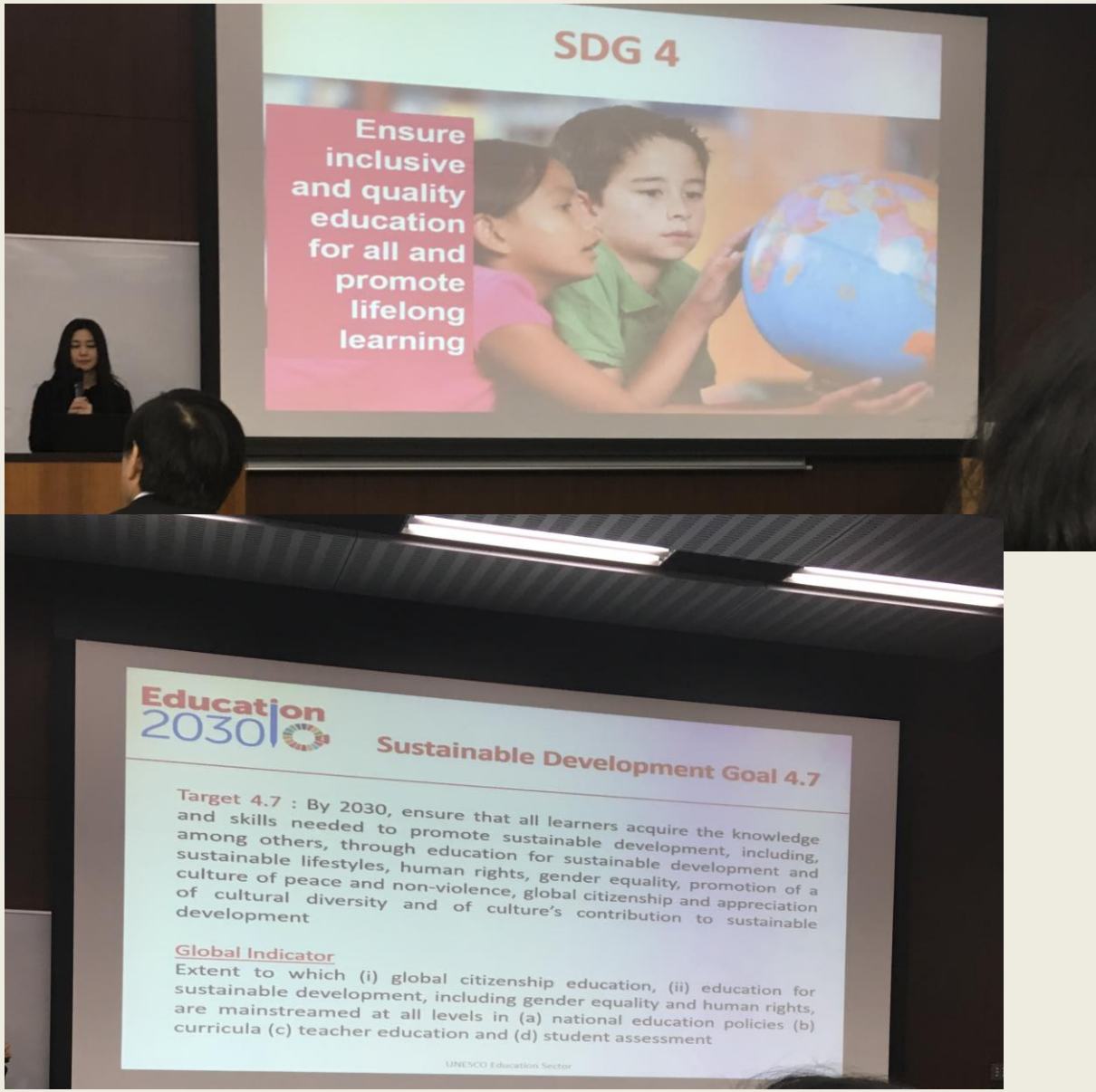
Sustainable Development Goal 4 (SDG 4)

Slides from presentation of Yoko Mochizuki, UNESCO-MGIEP, February 9, 2017, Tokyo, Japan

Question:

How do you think we take a relevant STEM activity such as the one described in this presentation and transform it to align with SDG4 or other SDG?

As an international community, we can collaboratively develop worthwhile tasks for SDG and STEM.



References

Eddy, C., Pratt, S., & Green, C. (under review) Interactive maps for systems of linear-inequalities. *Mathematics Teacher*.

Mochizuki, Y. (2017). *Understanding SDGs and SDG Target 4.7.* APEC-Tsukuba and UNESCO (MGIEP) International Conference XI, Tokyo, Japan