



uplifteducation

9th & 10th Grades Math Summer Assignment

Purpose of Assignment:

You will be analyzing data trends in COVID-19 cases in the states of Florida and Texas. Florida and Texas have similarly large populations and have both recently chosen to begin the process of “re-opening” the state from quarantine. The end goal of analyzing this data is to argue against or justify the opening of these two states. You will be calculating rates of change of cases in these states as your primary mathematical rationale for your decision, though that does not have to be your only source of justification. Though it is not required, you might find it useful to research other data trends in these states or bring in your own quarantine experiences into this assignment.

Materials needed:

- Graphing calculator – can use online graphing calculators
- Access to the internet
- Open the following links:
 - <https://tinyurl.com/uplifthsmath>
 - <https://www.worldometers.info/coronavirus/usa/florida/>
 - <https://www.worldometers.info/coronavirus/usa/texas/>

Directions:

1. Open the links above. The assignment is in the Google Form attached to the tinyurl.
2. Fill in your scholar information (name, grade and school)
3. Complete all questions to the best of your capability
4. Reach out via the information provided if you have any questions.
5. Use the rubric on the other side of this document to guide you in your work. This is the same rubric teachers will be using to grade your short answers.

Rubric to be used for short answers:

Adapted from IB MYP Criterion D: Applying mathematics in real-life contexts Year 5 (strand iii removed)

Achievement Level	IB Level Descriptor	Task specific clarification
0	The student does not reach a standard described by any of the descriptors given below	There is not enough evidence to give the student a grade on Communication in Mathematics.
1-2	The student is able to: i. identify some of the elements of the authentic real-life situation ii. apply mathematical strategies to find a solution to the authentic real-life situation, with limited success.	The scholar identifies one non-mathematical component of the COVID situation. The scholar sometimes shows a clear understanding of rates of change and how to identify them from a graph. The scholar sometimes references the rates of change and/or non-mathematical elements to discuss their choices.
3-4	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select , with some success, adequate mathematical strategies to model the authentic real-life situation iv. discuss whether the solution makes sense in the context of the authentic real-life situation.	The scholar identifies some non-mathematical components of the COVID situation. The scholar sometimes shows a clear understanding of rates of change and their real-world context . The scholar consistently references the rates of change and/or non-mathematical elements to discuss their choices.
5-6	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select adequate mathematical strategies to model the authentic real-life situation iv. explain the degree of accuracy of the solution v. explain whether the solution makes sense in the context of the authentic real-life situation.	The scholar identifies many non-mathematical components of the COVID situation. The scholar shows a clear understanding of rates of change and their real-world context . The scholar consistently references the rates of change and/or non-mathematical elements to explain their choices.
7-8	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select appropriate mathematical strategies to model the authentic real-life situation iv. justify the degree of accuracy of the solution v. justify whether the solution makes sense in the context of the authentic real-life situation.	The scholar clearly identifies many non-mathematical components of the COVID situation and their impact on their reasoning. The scholar shows a clear understanding of rates of change, their real-world context and their impact on the real-life situation. The scholar consistently references the rates of change and non-mathematical elements to justify their choices.