INVESTIGATE THE WORLD

How well does the student use mathematics to model and investigate a given issue, situation, or event?

MATH6-8.INV1.MODEL
- I can develop a mathematical model that fits a particular situation or problem. This means that I can use mathematics to create a representation, description, or quantification of some aspect of a situation or problem. It also means that the model should use relevant data and information provided.

MATH6-8.INV2.RLTNS
- I can explain how the parameters of an issue, situation, or event are reflected in a model. This means that I can describe how the characteristics of an issue, situation, or event are reflected in the mathematic model create. It also means that I have explained how I used relevant information.

MATH6-8.INV3.RPRSN
- I can use appropriate mathematical tools, procedures, and representations to explore an issue, situation, or event. This means that the mathematical tools, procedures, and representations help me better understand an issue, situation or event.

MATH6-8.INV4.SELEC
- I can determine which solution strategy is appropriate to use in solving a mathematical problem. This means that before using one, I can describe a strategy that might help solve a mathematical problem.
- I can use an appropriate solution strategy to solve a mathematical problem. This means that I can use the action plan I selected to achieve a mathematical solution.

MATH6-8.INV5.STRTG
- I can determine which strategy is appropriate to use in verifying my solution. This means that before using one, I can describe a strategy that might help me verify my solution to a mathematical problem.
- I can use an appropriate strategy to verify a solution to a mathematical problem. This means that I can use the action plan I selected to verify my mathematical solution.

RECOGNIZE PERSPECTIVES

How well does the student recognize the impact of his/her mathematical analyses on themselves and others?

MATH6-8.PERS1.ARGUE
- I can use my mathematical data and analyses to draw a conclusion or generate an argument. This means that I arrive at a conclusion about a problem using mathematical data and analyses as part of my evidence. This also means that I can generate an argument about a problem using mathematical data and analyses as part of my evidence.

MATH6-8.PERS2.VRIFY
- I can collaborate with others to verify my mathematical operations. This means that I work closely with others to confirm the correctness and/or reasonableness of the mathematics used.

MATH6-8. PERS3.IMPLC
- I can identify the implications of my conclusions. This means that I can identify the effects that my conclusions could have on future learning.
- I can identify the implications of my argument. This means that I can identify the effects that my argument could have on future learning.
- I can evaluate these effects. This means that I can think about the pros and cons of my results.

MATH6-8.PERS4.PERSP
- I can recognize unintended consequences and different perspectives. This means that I can describe unexpected results of my arguments and conclusions or different perspectives on them that are based on other people's cultural, historical, political, social, or personal points of view.
- I can address unintended consequences and different perspectives. This means that I can describe what to do about the unexpected results of my arguments and conclusions, as well as what to do when people have different perspectives on them.

MATH6-8.PERS5.POSTN
- I can maintain a perspective that is mostly consistent with my arguments and conclusions. This means that I can describe a point of view that should agree with my arguments and conclusions, which are mostly supported by mathematics.

Version 1.1

COMMUNICATE IDEAS

How clearly and accurately does the student communicate and defend his/her mathematical thinking, approaches, representations, solution, and decisions?

MATH6-8.COMM1.COMM

- I can explain mathematical concepts, procedures, and relationships. This means that I can describe mathematical concepts, procedures, and relationships in a way that is mostly organized and sequenced.

- I can justify mathematical concepts, procedures, and relationships. This means that I can prove the mathematical concepts, procedures, and relationships in a way that is mostly organized and sequenced.

MATH6-8.COMM2.DEFNS

- I can defend my mathematical conclusion or argument. This means that I can use some concepts, procedures, or data drawn directly from a model I have constructed to defend my work.

MATH6-8.COMM3.SYMBL

- I can express mathematical ideas using mathematic terms, symbols, and conventions. This means that I use mathematic terms, symbols, and conventions to express mathematical ideas.

- I can evaluate the process. This means that I think about some of the results and evaluate if I used the best terms, symbols, and conventions.

MATH6-8.COMM4.GRAMM

- I can engage in clear mathematical discourse using simple, familiar mathematical terminology correctly. This means that I can use the language of mathematics to communicate verbally and in writing. This also means that my work is generally free of errors in grammar, usage and punctuation.

MATH6-8.COMM5.MEDIA

- I can select an appropriate medium. This means that I select the medium that is most appropriate for communicating my mathematical ideas.

- I can use the medium effectively. This means tjat I use the method I have selected to best communicate my mathematical idea and that my use of the media is skillful and effective.

Version 1.1

TAKE ACTION

How well does the students advocate for, engage in, and reflect on plausible and responsible actions that are supported by his/her mathematics?

MATH6-8.ACT1.ADVCT
- I can advocate for a course of action. This means that I am able to speak or write in support of a course of action. It also means that this action is supported by mathematics and is realistic and responsible.

MATH6-8.ACT2.ACTN
- I can identify a plan of action that is somewhat consistent with my argument, conclusion, or decision. This means that I am able to find a plan of action that is supported by some mathematics, and is mostly realistic and responsible.

MATH6-8.ACT3.IMPRT
- I can describe the importance of my plan of action. This means that I can explain why my plan is important. It also means that I can connect my plan to the peoples and nations of the world.