



## INVESTIGATE THE WORLD

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

- **MATH3-5.INV1.MODEL.** Creates a simple mathematical model to describe a situation or problem, but may omit some given data or information.
- **MATH3-5.INV2.RLTNS.** Illustrates mathematical relationships by a simple model that reflects a complex situation, or attempts to generalize a familiar model to fit a similar situation.
- **MATH3-5.INV3.RPRSN.** Employs appropriate mathematical tools, procedures, and/or representations to explore the issue, situation, or event.
- **MATH3-5.INV4.SELEC.** Generates a range of initial solution strategies and outlines why a particular strategy was chosen.
- **MATH3-5.INV5.STRTG.** Identifies a reasonable initial strategy to verify the solution and outlines why this strategy was chosen.

## RECOGNIZE PERSPECTIVES

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

- **MATH3-5.PERS1.ARGUE.** Draws a reasonable initial conclusion and provides simple explanations that are supported by data.
- **MATH3-5.PERS2.VRIFY.** Verifies processes or conclusions within a collaborative group, but does not seek external verification.
- **MATH3-5.PERS3.IMPLC.** Expresses some general implications of a conclusion or conjecture arising from a mathematical model or process.
- **MATH3-5.PERS4.PERSP.** Recognizes and articulates some different perspectives using precise mathematical language when appropriate.
- **MATH3-5.PERS5.POSTN.** Articulates a conjecture that reflects the mathematical process procedure model that results in a mathematically valid conclusion.

## COMMUNICATE IDEAS

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

- **MATH3-5.COMM1.COMM.** Explains and justifies mathematical reasoning, concepts, procedures, or relationships using precise mathematical language.
- **MATH3-5.COMM2.DEFNS.** Defends a conclusion, conjecture, decision, or argument, but does not include all relevant mathematical concepts, procedures, or data from the model.
- **MATH3-5.COMM3.SYMBL.** Decontextualizes a mathematical idea by using mathematical terms, symbols, and conventions.
- **MATH3-5.COMM4.GRAMM.** Engages in mathematical discourse using simple, familiar mathematical terminology correctly with few errors in grammar, usage, and punctuation.
- **MATH3-5.COMM5.MEDIA.** Selects an appropriate medium to communicate mathematical ideas in a basic way.

## TAKE ACTION

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

- **MATH3-5.ACT1.ADVCT.** Advocates for a course of action that is somewhat plausible, somewhat responsible, and partially supported by mathematics.
- **MATH3-5.ACT2.ACTN.** Identifies a plan of action supported by the mathematics that is somewhat viable, manageable, and/or responsible that is somewhat consistent with the argument, conclusion, or decision.
- **MATH3-5.ACT3.IMPRT.** Describes in general ways the importance of the plan, using some support from mathematical conclusions or conjectures.