Claim #2
PROBLEM SOLVING
Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem-solving strategies.

Target A
Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace.

Target B
Select and use appropriate tools strategically.

Target C
Interpret results in the context of a situation.

Target D
Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas).


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Ref: Math Interim Assessment Blocks Blueprint
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Claim #3
COMMUNICATING REASONING
Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.

- **Target A**
  Test propositions or conjectures with specific examples.
  - DOK 2, 3

- **Target B**
  Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures.
  - DOK 2, 3

- **Target C**
  State logical assumptions being used.
  - DOK 2, 3

- **Target D**
  Use the technique of breaking an argument into cases.
  - DOK 2, 3

- **Target E**
  Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is.
  - DOK 2, 3

- **Target F**
  Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
  - DOK 2, 3

- **Target G**
  At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)
  - DOK 2, 3

Mathematics High School IAB - Performance Task

3 question is represented by the targets listed in Claim 4.

Claim #4
MODELING AND DATA ANALYSIS

Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace.

Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem.

Target C: State logical assumptions being used.

Target D: Interpret results in the context of a situation.

Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.

Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas).

Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems.


DOK 2, 3
DOK 2, 3, 4
DOK 1, 2, 3
DOK 2, 3
DOK 2, 3, 4
DOK 1, 2, 3
DOK 3, 4

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