Name: <u>Student A</u>

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Developing	The student demonstrates a partial understanding of concepts and skills associated with task. The student uses the Pythagorean Theorem to justify the lengths of the square's diagonals.
Problem Solving	Proficient	The student's problem-solving strategy displays an understanding of the underlying mathematical concept. The student was able to dictate what information and what was needed to begin the problem.
Communication and Reasoning	Developing	The student's reasoning is written but not organized. The student used limited mathematical language including symbolic notation to partially communicate thinking.
Representations and Connections	Proficient	The student uses a representation with accurate labels, to explore and model the problem. The student recognizes the right triangles formed by the diagonals of the of the square, in addition to the right triangles formed by the sides of the square.

Name: <u>Student B</u>

Criteria	Performance Level (Advanced, Proficient,	Rationale
Mathematical Understanding	Developing, Emerging) Emerging	The student demonstrates no understanding of the concepts and skills associated with the task. The student clearly identifies the properties of a squares diagonal but make limited attempts to find the solution to the problem.
Problem Solving	Developing	The student's problem-solving strategy displays a limited understanding of the underlying mathematical concept. The directions stated the pitcher's mound is not equidistant from each base. The student did not confirm the reasonableness of their solution.
Communication and Reasoning	Developing	The student provides limited or inconsistent evidence to support their claim. The student finds the distance from home to second base but incorrectly determines the pitcher's mound to be equidistant from each base.
Representations and Connections	Emerging	The student used no representation to model the problem. The student did not label the diagram nor provide any additional mathematical connections to the problem. The student used their mathematical understanding of a square to determine its diagonals but did not connect them to the task.

Name: <u>Student C</u>

Criteria	Performance Level	
	(Advanced, Proficient,	Rationale
	Developing, Emerging)	
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skill associated with the task. The student was able to use the Pythagorean Theorem to correctly find the length of the diagonals of the square and then use the given information to determine the distance from the pitcher's mound to each base.
Problem Solving	Advanced	The student's problem-solving strategy is well- developed. The student's problem-solving strategy displays an understanding of the mathematical concept. The student produced a solution relevant to the problem and confirmed the reasonableness of the solution. After finding the length of the diagonals, the student found the distance from the pitcher's mound to each base.
Communication and Reasoning	Developing	The student uses limited mathematical language to partially communicate thinking. The student's thinking is shown by the algebraic calculations that are made.
Representations and Connections	Proficient	The student uses a representation with accurate labels, to explore and model the problem. The student correctly labeled the distances of the squares' sides and diagonal. The student also provided the measurements on a triangle and a square to make the connection to the baseball field.

Name: <u>Student D</u>

Criteria	Performance Level	
	(Advanced, Proficient,	Rationale
	Developing, Emerging)	
Mathematical Understanding	Developing	The student demonstrates a partial understanding of concepts and skills associated with the task. The student was able to recall the properties of the angles of a square. The student also contemplated using a special right triangle property of 45-45-90 triangles. The student incorrectly assumed the pitcher's mound was equidistant to the all bases and incorrectly multiplied 60.5 x 4.
Problem Solving	Emerging	The student's problem-solving strategy is not evident, and their computations do not produce a solution.
Communication and Reasoning	Emerging	The student does not provide correct reasoning or justification. The student does not use mathematical knowledge to communicate thinking. The students' computations are not evidence to support arguments or claims.
Representations and Connections	Emerging	The student does not use a representation to model the problem. The student labels the right angles that exist on the square but does not label the length of the sides nor the distance from the pitcher's mound to home.

Name: <u>Student E</u>

Criteria	Performance Level	
	(Advanced, Proficient,	Rationale
	Developing, Emerging)	
Mathematical Understanding	Developing	The student demonstrates a partial understanding of concepts and skills associated with the task. The student uses the pitchers' mound distance as the distance from all the bases even though the information given in the task states otherwise. The student attempted to use the Pythagorean theorem which lead to an incomplete solution.
Problem Solving	Emerging	The student problem solving strategy does not produce a solution that is relevant to the problem. The student does not use the statement in the task the states the pitching mound is not equidistant from each base.
Communication and Reasoning	Developing	The student's reasoning provided limited or inconsistent evidence to support arguments and claims. The student's incorrect use of the Pythagorean Theorem is limited and partially communicates thinking.
Representations and Connections	Proficient	The student uses a representation with accurate labels to explore and model the problem. The student correctly labeled the sides of the square and labeled the distance from home to the pictures mound. The student also creates a right triangle to model the problem.

Name: <u>Student F</u>

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of concepts and skills associated with the task. The student applies mathematical concepts which lead to a solution.
Problem Solving	Proficient	The student's problem-solving strategy displays an understanding of the underlying mathematical concept. The student produces a solution relevant to the task and confirms using the diagram of the baseball field with all distances.
Communication and Reasoning	Developing	The student uses limited mathematical language to partially communicate thinking through computations and diagrams.
Representations and Connections	Proficient	The student uses a representation with accurate labels to explore and model the problem. The student uses the right triangle to find the distance from home to second base and then subtracts to find the distance from the pitcher's mound to each base.