## Anchor Paper Scoring and Rationales-Task: Take Me Out to the Ball Game

## Name: Student A

| Criteria | Performance Level <br> (Advanced, Proficient, <br> Developing, Emerging) |  |
| :---: | :---: | :--- |
| Mathematical <br> Understanding | Developing | Rationale |
| 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. |  |  |$|$

## Name: Student B

| Criteria | Performance Level <br> (Advanced, Proficient, <br> Developing, Emerging) |  |
| :---: | :--- | :--- |
| Mathematical <br> Understanding | Remerging | The student demonstrates no understanding of the <br> concepts and skills associated with the task. The <br> student clearly identifies the properties of a squares <br> diagonal but make limited attempts to find the <br> solution to the problem. |
| Problem Solving | Developing | The student's problem-solving strategy displays a <br> limited understanding of the underlying <br> mathematical concept. The directions stated the <br> pitcher's mound is not equidistant from each base. <br> The student did not confirm the reasonableness of <br> their solution. |
| Communication <br> and <br> Reasoning | Developing | The student provides limited or inconsistent <br> evidence to support their claim. The student finds <br> the distance from home to second base but <br> incorrectly determines the pitcher's mound to be <br> equidistant from each base. |
| Representations |  |  |
| and |  |  |
| Connections |  |  |

## Name: Student C

$\left.\begin{array}{|c|l|l|}\hline \text { Criteria } & \begin{array}{c}\text { Performance Level } \\ \text { (Advanced, Proficient, } \\ \text { Developing, Emerging) }\end{array} \\ \text { Mathematical } \\ \text { Understanding }\end{array} \quad \begin{array}{l}\text { The student demonstrates an understanding of the } \\ \text { concepts and skill associated with the task. The } \\ \text { student was able to use the Pythagorean Theorem } \\ \text { to correctly find the length of the diagonals of the } \\ \text { square and then use the given information to } \\ \text { determine the distance from the pitcher's mound to } \\ \text { each base. }\end{array}\right\}$

Name: Student D

| Criteria | Performance Level (Advanced, Proficient, Developing, Emerging) | Rationale |
| :---: | :---: | :---: |
| 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 $60.5 \times 4$. |
| 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: Student E

| Criteria | Performance Level (Advanced, Proficient, Developing, Emerging) | Rationale |
| :---: | :---: | :---: |
| 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: Student F

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

