

Item 5

Claim 2
3.MD.A

| SAMPLE | SCORE | RATIONALE |
|--------|-------|--|
| A | 1 | The response includes a clear statement of disagreement with Katie. The student stated that 6 kids used less than $\frac{1}{4}$ of the paint, and provided a correct calculation of the number of groups of 6 students in the class of 24 students ($4 \times 6 = 24$). Although the explanation would be more thorough if the ideas were more explicitly connected, the central comparison that is relevant for determining if there is enough paint is clearly present. This comparison is between the estimated portion of paint used (less than $\frac{1}{4}$ of the total available) and the portion of students in the class who have used the paint so far (exactly $\frac{1}{4}$). The response receives full credit of 1 point. |
| B | 0 | This response demonstrates an understanding that there is an element of unpredictability in the situation. It is unclear that all groups will use approximately the same amount of paint; this is an assumption that must be made. That said, the student did not demonstrate any mathematical thinking or reasoning, and the response earns 0 points. |
| C | 1 | The student stated that there is enough paint because $4 \times 6 = 24$. On its own, this statement would not be a sufficient explanation, however the student then used the information provided in the diagram to create a model to demonstrate a possible distribution of the paint across 4 equal groups of 6 people each. The response earns full credit of 1 point. |
| D | 1 | In this response, the student interpreted the diagram in a straightforward way, and used basic number sense and contextualized problem-solving skills to argue that there is enough paint: There are 4 levels identified on the paint container, and 6 students used up the amount of paint indicated by the first of the 4 levels. The student provided the fact that $4 \times 6 = 24$ to represent 4 groups of 6 in 24. Four levels of paint indicate 4 portions of paint for each group of 6 students, and there are 4 groups of 6 students in all. Because there is no evidence of recognition that the portion sizes are unequal, some may not want to give this response 1 point. However, the explanation is logical, and this response squeaks by for full credit of 1 point. |
| E | 0 | The response does not include evidence of logic or reasoning about the amount of paint left in the container compared to how many people used the paint and how many students still need to use the paint. The student used all of the given information from Task 1 to attempt to justify a disagreement with Katie, but did not provide a logical explanation that referred to the diagram given for the problem. The response earns 0 points. |
| F | 0 | It appears that the student attempted to apply his/her understanding of creating equal groups of 6 students, and used repeated subtraction to estimate if there would be enough paint. However, the response does not include a clearly expressed argument and does not include evidence of a logical explanation. The response earns 0 points. |