

Item 3

Claim 3
3.OA.A.3

SAMPLE	SCORE	RATIONALE
A	2	The student used decomposition and the distributive property to accurately calculate the number of pieces of chalk in the 6 boxes that the teacher currently has. In addition, the student compared the amount available (108) to the total amount needed (120) to determine that there is not enough chalk available.
B	1	This response demonstrates an active use of decomposition and the distributive property, first to show exactly how much chalk is needed (5 pieces of chalk for 24 students). Next, the student calculated accurately how much chalk is available, again using decomposition of larger numbers and the distributive property. The response includes the word “Check,” suggesting a comparison between the “check” number of 120 and the derived amount available (108). However, the student did not explicitly state or explain the comparison that was made. The response consists of a collection of accurate and clear calculations, but does not include sufficient explanation to fully support Claim 3. The response earns partial credit of 1 point.
C	0	This response shows a partial, concrete understanding of the situation. The student attempted to set up the problem by showing twenty-four 5s added together. The student also represented 6 boxes of chalk with six 18s, but did not show any calculations to support finding either of the relevant total amounts of chalk (available chalk; needed chalk). The student stated, “There are 10 pieces of chalk left,” but the response does not include an explanation of where this amount came from, or how it relates to whether or not there is enough chalk for Art Day. Without work or calculations to support this statement, the response receives 0 points.
D	1	The student accurately calculated the amount of chalk in 6 boxes by using a repeated addition strategy. The student clearly showed how the total was calculated, but there is no evidence of attempting to complete the second part of the problem, which requires a decision about whether or not there is enough chalk for Art Day. There is no explanation, nor is there a completed answer to the question. The response receives partial credit of 1 point.
E	2	The student calculated 6×18 by decomposing the factor 18 into one 10 and eight 1s, and multiplying each of these numbers by the factor 6. The student then added the products together to a sum of 108. The student compared the amount available (108 pieces) to what is needed (120 pieces), to conclude that the teacher needs to buy more chalk. The justification earns full credit for this response.
F	0	This response suggests that the student did not have a clear understanding of the situation, or what is being asked in the problem. The student used the numbers supplied in the problem, added them up to get a sum of 144, and then added this sum to 134. The reasoning for these calculations is unclear. The student did not attempt to respond to the second part of the problem, which requires an explanation, and there is no attempt to provide an argument for whether or not there is enough chalk. The response earns 0 points.

Item 3 *(continued)***Claim 3**
3.OA.A.3

SAMPLE	SCORE	RATIONALE
G	2	The student developed an approach to calculating exactly how many pieces of chalk are currently available, using repeated multiplication and addition strategies to calculate the total number of pieces of chalk in 6 boxes. The student's written statements suggest a clear comparison between the amount of chalk needed and the total number of pieces available. The response provides an effective approach to determining that there is not enough chalk, and a justification based on the comparison suggested in the statements. The response earns full credit.
H	0	Although this response includes the statement, "no becus we don't have enough," the student did not accurately calculate how much chalk was available, and did not provide an explanation as to how he/she figured out that there is not enough chalk. The grouping of 1s suggests some partially successful concrete reasoning about the boxes of 18 single pieces of chalk. The response earns 0 points.