# Name: Student A

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task and arrives at mostly correct solutions for parts 1 and 2. The student demonstrates an understanding of less than in the inequality. There is a misconception in the expression for Sky High, but for an introductory task, the algebraic representation is proficient.
Problem Solving	Proficient	The student's strategy of multiplying and adding the correct amounts shows an understanding of the underlying math concepts. The student produces a solution that is relevant to the problem.
Communication and Reasoning	Developing	The student's limited solution steps partially communicates their thinking. This limited evidence does not fully support the student's claims.
Representations and Connections	Developing	Although the student produces a mostly correct inequality, there is limited representation in the work in parts 1 & 2 and one mathematical error made in part one that cannot be determined due to the lack of a model for the work.

Name: Student B

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task and arrives at correct solutions for all parts of the task. The student demonstrates an understanding of less than in the inequality and even correctly identifies the need to subtract 10 from the number of friends for Sky High.
Problem Solving	Proficient	The student's strategy of multiplying and adding the correct amounts shows an understanding of the underlying math concepts. The student produces solutions that are relevant to the problem.
Communication and Reasoning	Proficient	The student shows all correct steps in work for parts 1 and 2. The student uses the correct mathematical language of inequalities and expressions in the correct inequality that models the problem.
Representations and Connections	Proficient	The student uses correct representations for the two locations to show all work in answering parts 1 and 2. The student also writes a correct inequality to model the problem.

Name: Student C

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Emerging	The student demonstrates no understanding of the concepts and skills associated with parts 2 and 3 of the task. Although the student obtains correct values in part 1, the actual answer for the question is not provided.
Problem Solving	Developing	The problem solving strategy in part 1 shows a limited understanding of the mathematical concepts. The solution obtained for part 2 is relevant to the problem, but is not correct.
Communication and Reasoning	Emerging	Although correct values are obtained in part 1, the student does not answer the question posed in the problem. The student does not provide correct reasoning or justification for part 2 of this problem. In part 3, the student has no correct reasoning.
Representations and Connections	Emerging	The student does not give a representation that is a full version of any part of this task. Although some work is shown in part 1, there is no indication of how the second number in each expression is obtained.

Name: Student D

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task and arrives at correct solutions for parts 1 and 2. The student demonstrates a misconception of less than in their inequality, but for an introductory task, the algebraic representation is proficient.
Problem Solving	Proficient	The student's strategy of multiplying and adding the correct amounts shows an understanding of the underlying math concepts. The student produces a solution that is relevant to the problem.
Communication and Reasoning	Developing	Although correct values are obtained in part 1, the student does not answer the question posed in the problem. The student's limited solution steps partially communicates their thinking. The student's reasoning in part 3 contains misconceptions.
Representations and Connections	Developing	The student uses a limited representation to model the problem in parts 1 and 2. In part 3, the student writes an expression rather than an inequality and does not correctly represent Sky High.

Name: Student E

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task and arrives at correct solutions for parts 1 and 2. The student demonstrates a misconception of less than in not writing an inequality, but correctly identifies the need to subtract 10 from the number of friends for Sky High. For an introductory task, the algebraic representation is proficient.
Problem Solving	Proficient	The student's strategy of multiplying and adding the correct amounts shows an understanding of the underlying math concepts. The student produces a solution that is relevant to the problem.
Communication and Reasoning	Proficient	The student obtains correct values in parts 1 & 2, and answers the questions posed in the problem. The student's work communicates thinking. The student's reasoning in part 3 contains a misconception of less than, but shows the higher order understanding of subtracting 10 from the number of students for Sky High.
Representations and Connections	Developing	The student uses a limited representation to model the problem in parts 1 and 2. In part 3, the student writes expressions rather than an inequality.

Name: Student F

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
Mathematical Understanding	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task and arrives at correct solutions for parts 1 and 2. The student demonstrates a misconception of "algebraic model" in not writing an inequality, but shows a progression of mathematical understanding in the earlier parts by moving from an add-on model to a multiply and add model.
Problem Solving	Proficient	The student's strategy of multiplying and adding the correct amounts shows an understanding of the underlying math concepts. The student produces a solution that is relevant to the problem.
Communication and Reasoning	Proficient	The student obtains correct values in parts 1 & 2, and answers the questions posed in the problem. The student's work communicates thinking. The student's reasoning in part 3 contains a misconception of "algebraic model", but clearly explains thinking in the context of the situation.
Representations and Connections	Developing	The student uses an accurate representation to model the problem in parts 1 and 2. In part 3, the student writes an explanation rather than an inequality.