IBMYP Rubric	Level Reached Self Evaluation	Level Reached Final Evaluation
A: Knowledge		
C: Communication		
D: Application in Real-World Contexts		

IMPORTANT STEP: Read all rubrics BEFORE you start this problem!
AFTER you have completed the task, fill out the Level Reached - Self Evaluation

I _____, **have not received or used any assistance other than my own knowledge on this problem.** (Your signature is required.)

Skill: Interpret solutions within the given constraints of a problem.

Problem: Last year's senior class spent $23.95 for each prom favor. This year's prom committee knows that their prom favor must be within $5.50 of last year's favor. Write a mathematical absolute value inequality that could be used to model the acceptable price **range** for this year's prom favor, and then solve the absolute value inequality to find the range of acceptable prices for a favor. *Explain* why the **type of inequality** you chose to solve this problem is appropriate.

IBMYP Criterion A: Knowing and Understanding

i. select the appropriate mathematics when solving problems in both familiar and unfamiliar situations
ii. apply the selected mathematics successfully when solving problems
iii. solve problems correctly in a variety of contexts

Achievement Level	Descriptor
0	The student does not reach a standard described by any of the descriptors given below
1 – 2	The student is able to: i. **select** appropriate mathematics when solving simple problems in familiar situations ii. **apply** the selected mathematics successfully when solving these problems iii. generally **solve** these problems correctly a number line is used to model the scenario compound inequality is used
3 – 4	The student is able to: i. **select** appropriate mathematics when solving **more complex** problems in familiar situations ii. **apply** the selected mathematics successfully when solving these problems iii. generally **solve** these problems correctly a compound inequality is used correctly in conjunction with a number line to model the scenario
5 – 6	The student is able to: i. **select** appropriate mathematics when solving **challenging** problems in familiar situations ii. **apply** the selected mathematics successfully when solving these problems iii. generally **solve** these problems correctly an absolute value inequality is used correctly to model the scenario, and a correct solution is present ; an attempt at justifying the type of solution is made
7 – 8	The student is able to: i. **select** appropriate mathematics when solving **more complex** problems in both familiar and **unfamiliar** situations ii. **apply** the selected mathematics successfully when solving these problems iii. generally **solve** these problems correctly an absolute value inequality is used correctly to model the scenario, and thorough and correct solution is present; a concise and thorough justification is included supporting the appropriateness of the type of inequality

IBMYP Criterion C: Communicating

i. **use** appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
ii. **use** appropriate forms of mathematical representation to present information
iii. move between different forms of mathematical representation
iv. **communicate** complete, coherent and concise mathematical lines of reasoning
v. **organize** information using a logical structure.

Achievement Level	Descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 – 2	The student is able to: i. **use** <u>limited</u> mathematical language ii. **use** <u>limited</u> forms of mathematical representation to present information iii. **communicate** through lines of reasoning that are <u>difficult to interpret</u>.
3 – 4	The student is able to: i. **use** <u>some</u> appropriate mathematical language ii. **use** <u>appropriate</u> forms of mathematical representation to present information <u>adequately</u> iiii. **communicate** through lines of reasoning that are <u>complete</u> iv. <u>adequately</u> **organize** information using a logical structure.
5 – 6	The student is able to: i. <u>usually</u> **use** appropriate mathematical language ii. <u>usually</u> **use** appropriate forms of mathematical representation to present information <u>correctly</u> iii <u>usually</u> move between <u>different</u> forms of mathematical representation iv. **communicate** through lines of reasoning that are complete and <u>coherent</u> v. **present** work that is <u>usually</u> **organized** using a logical structure.
7 – 8	The student is able to: i. <u>consistently</u> **use** appropriate mathematical language ii. **use** appropriate forms of mathematical representation to <u>consistently</u> present information correctly iii move <u>effectively</u> between <u>different</u> forms of mathematical representation iv. **communicate** through lines of reasoning that are <u>complete, coherent and concise</u> v. **present** work that is <u>consistently</u> **organized** using a logical structure.

IBMYP Criterion D: Applying mathematics in real-life contexts

i.   **identify** relevant elements of authentic real-life situations
ii.   **select** appropriate mathematical strategies when solving authentic real-life situations
iii.   **apply** the selected mathematical strategies successfully to reach a solution
iv.   **justify** the degree of accuracy of a solution
v.   **justify** whether a solutions makes sense in the context of the authentic real-life situation.

Achievement Level	Level descriptor
0	The student does not reach a standard described by any of the descriptors given below.
1 – 2	The student is able to: i. **identify** some of the elements of the authentic real-life situation ii. **apply** mathematical strategies to find a solution to the authentic real-life situation, with limited success
3 – 4	The student is able to: i. **identify** the relevant elements of the authentic real-life situation ii. **select,** with some success, adequate mathematical strategies to model the authentic real-life situation iii. **apply** the mathematical strategies to reach a solution to the authentic real-life situation iv. **discuss** whether the solution makes sense in the context of the authentic real-life situation.
5 – 6	The student is able to: i. **identify** the relevant elements of the authentic real-life situation ii. **select** adequate mathematical strategies to model the authentic real-life situation iii. **apply** the selected mathematical strategies to reach a valid solution to the authentic real- life situation iv. **explain** the degree of accuracy of the solution v. **explain** whether the solution makes sense in the context of the authentic real-life situation.
7 – 8	The student is able to: i. **identify** the relevant elements of the authentic real-life situation ii. **select** appropriate mathematical strategies to model the authentic real-life situation iii. **apply** the selected mathematical strategies to reach a correct solution to the authentic real-life situation iv. **justify** the degree of accuracy of the solution v. **justify** whether the solution makes sense in the context of the authentic real-life situation.