

Challenge

Planning Notes

- You may wish to have students work in pairs or small groups for this activity.
- Encourage students to use rulers when creating their logos.
- Some students may benefit from using **Master 9 0.5 Centimetre Grid Paper** to draw their logos.
- For #3, provide some examples of business cards. Students can measure them to determine the dimensions.

Common Errors

- Students may try to take shortcuts and create logos that only include a square.
- R_x** Encourage them to design more elaborate logos to attract customers to their community, organization, school, project, or service.

The chart below shows the Rubric for the Challenge and provides notes that specify how to identify the level of specific answers for this project.

Score/Level	Holistic Descriptor	Specific Question Notes
5 (Standard of Excellence)	<ul style="list-style-type: none"> <input type="checkbox"/> Applies/develops thorough strategies and mathematical processes for making significant comparisons/connections that demonstrate a comprehensive understanding of how to develop a complete solution <input type="checkbox"/> Uses efficient and effective procedures that may contain a minor mathematical error that does not affect understanding <input type="checkbox"/> Uses significant mathematical language to explain understanding and provides in-depth support for the conclusion 	<ul style="list-style-type: none"> • provides a complete and correct solution
4 (Above Acceptable)	<ul style="list-style-type: none"> <input type="checkbox"/> Applies/develops thorough strategies and mathematical processes for making reasonable comparisons/connections that demonstrate a clear understanding <input type="checkbox"/> Uses reasonable procedures that may contain a minor mathematical error that may hinder the understanding in one part of a complete solution <input type="checkbox"/> Uses appropriate mathematical language to explain understanding and provides clear support for the conclusion 	<ul style="list-style-type: none"> • provides a complete response to all parts of the exercise with a weak justification or a minor calculation error in one part that does not affect the understanding of the problem <i>or</i> • provides a complete and correct response to #2 and #3 based on an incorrect #1
3 (Meets Acceptable)	<ul style="list-style-type: none"> <input type="checkbox"/> Applies/develops relevant strategies and mathematical processes for making some comparisons/connections that demonstrate a basic understanding <input type="checkbox"/> Uses basic procedures that may contain a major mathematical error or omission <input type="checkbox"/> Uses common language to explain understanding and provides minimal support for the conclusion 	<ul style="list-style-type: none"> • provides a correct and complete response to #1 and #2 or #1 and #3 <i>or</i> • provides a correct and complete response to #2 or #3 based on a complete but incorrect #1; justification is present but may be weak <i>or</i> • provides correct partial solutions to all parts of the exercise <i>or</i> • provides answers without justification
2 (Below Acceptable)	<ul style="list-style-type: none"> <input type="checkbox"/> Applies/develops some relevant mathematical processes for making minimal comparisons/connections that lead to a partial solution <input type="checkbox"/> Uses basic procedures that may contain several major mathematical errors <input type="checkbox"/> Communication is weak 	<ul style="list-style-type: none"> • provides a correct and complete #1 <i>or</i> • provides a correct and complete #1 and makes a correct start to one other part <i>or</i> • provides a correct start to either #2 or #3 based on an incorrect but complete #1
1 (Beginning)	<ul style="list-style-type: none"> <input type="checkbox"/> Applies/develops an initial start that may be partially correct or could have led to a correct solution <input type="checkbox"/> Communication is weak or absent 	<ul style="list-style-type: none"> • provides a correct start to one part of the exercise <i>or</i> • starts or completes #1, but does not meet the design requirements