Classroom Assessments Based on Standards
Integrated College Prep I – Unit 1
Scoring Rubric

PROFICIENT RESPONSES: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

4  Stem and Leaf  A stem and leaf is correctly constructed and labeled.
    Histogram  A histogram is correctly constructed and labeled.
    Five Number Summary/Box Plot  The five-number summary is correct and the box plot is correctly constructed and labeled.
    Graph  A graph is correctly constructed and scaled.
    Graph Model  An accurate y=x line is drawn.

3  Stem and Leaf  A stem and leaf is constructed with minor flaws.
    Histogram  A histogram is constructed with minor flaws.
    Five Number Summary/Box Plot  The five-number summary is basically correct and/or the box plot has minor flaws.
    Graph  A graph is constructed with minor flaws.
    Graph Model  A basically correct y=x line is drawn.

NON-PROFICIENT RESPONSES: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

2  Stem and Leaf  A stem and leaf is constructed but is incomplete or has major flaws.
    Histogram  A histogram is constructed but is incomplete or has major flaws.
    Five Number Summary/Box Plot  The summary and box plot are attempted but have major flaws.
    Graph  A graph is attempted but has major flaws or is incomplete.
    Graph Model  The y=x line is incorrectly placed.

1  Stem and Leaf  A stem and leaf is attempted but it is unclear what is presented.
    Histogram  A histogram is attempted but it is unclear what is presented.
    Five Number Summary/Box Plot  The summary and box plot are attempted but have major flaws.
    Graph  A graph is attempted but unclear as to what is presented.
    Graph Model  The y=x line is not attempted.

0  The student makes no attempt at solving the problem.
   The student’s work and comments are completely off-task.
   The student’s work is illegible.
   The student simply restates the problem with no original work.
Classroom Assessments Based on Standards
Integrated College Prep I – Unit 2
Scoring Rubric

PROFICIENT RESPONSES: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

4  Rule (Equation)  A correct rule (equation) is presented.
    Graph        A graph is correctly constructed and scaled.
    Description of graph  Response is complete with a clear explanation of mathematical reasoning.
    Explanation  Variable is identified and explanation is complete.
    Table        Table is completed correctly.

3  Rule (Equation)  A basically correct rule (equation) is presented.
    Graph        A graph is constructed with minor flaws.
    Description of graph  Response is basically complete and uses some mathematical reasoning.
    Explanation  Variable is identified but explanation is weak.
    Table        Table is completed but has minor flaws.

NON-PROFICIENT RESPONSES: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

2  Rule (Equation)  A partial or incorrect rule (equation) is presented.
    Graph        A graph is completed but has major flaws.
    Description of graph  An explanation is attempted, but unclear in mathematical reasoning.
    Explanation  Variable is identified but there is no explanation.
    Table        Table is completed but has major flaws.

1  Rule (Equation)  No rule (equation) is presented.
    Graph        A graph is attempted, but it is unclear what is represented.
    Description of graph  A minimal explanation is presented.
    Explanation  Variable is not identified and there is no explanation.
    Table        Table is completed but it is unclear what is being presented.

0  The student makes no attempt at solving the problem.
The student’s work and comments are completely off-task.
The student’s work is illegible.
The student simply restates the problem with no original work.
### Classroom Assessments Based on Standards
#### Integrated College Prep I – Unit 3
#### Scoring Rubric

**PROFICIENT RESPONSES:** Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Graph</th>
<th>Linear model/Line of linear regression</th>
<th>Prediction</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>An appropriate graph is correctly constructed and scaled.</td>
<td>A correct linear model is presented.</td>
<td>A correct prediction is made.</td>
<td>Responses are complete with clear explanations.</td>
</tr>
<tr>
<td>3</td>
<td>An appropriate graph is constructed with minor flaws.</td>
<td>A basically correct linear model is presented.</td>
<td>A basically correct prediction is made.</td>
<td>Responses are basically complete with some unclear explanations.</td>
</tr>
<tr>
<td>2</td>
<td>An appropriate graph is attempted, but is incomplete or has major flaws.</td>
<td>A linear model is incorrectly placed.</td>
<td>A prediction is attempted, but not correct.</td>
<td>Responses are minimal.</td>
</tr>
<tr>
<td>1</td>
<td>An appropriate graph is attempted, but is unclear what the graph represents.</td>
<td>The linear model is not attempted.</td>
<td>No prediction is made.</td>
<td>Responses are nonexistent.</td>
</tr>
<tr>
<td>0</td>
<td>The student makes no attempt at solving the problem.</td>
<td>The student’s work and comments are completely off-task.</td>
<td>The student’s work is illegible.</td>
<td>The student simply restates the problem with no original work.</td>
</tr>
</tbody>
</table>

**NON-PROFICIENT RESPONSES:** Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

- **Score 2:** The student makes no attempt at solving the problem.
- **Score 1:** The student’s work and comments are completely off-task.
- **Score 0:** The student’s work is illegible.
- **Score 0:** The student simply restates the problem with no original work.
Classroom Assessments Based on Standards
Integrated College Prep I – Unit 4
Scoring Rubric

PROFICIENT RESPONSES: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Graph model</th>
<th>Explanation</th>
<th>Digraph/critical path</th>
<th>Conflict</th>
<th>Conflict explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>The graph model is correct and clearly presented.</td>
<td>Response is clear with a good explanation of graph model.</td>
<td>A correct digraph is presented with the critical path correctly labeled.</td>
<td>The conflict is presented correctly in graph form.</td>
<td>Response is complete with a clear understanding of the conflict graph.</td>
</tr>
<tr>
<td>3</td>
<td>The graph model is basically correct with minor flaws.</td>
<td>Response is basically complete, but explanation of graph is not very clear.</td>
<td>A correct digraph is presented with an incorrect critical path.</td>
<td>The conflict graph is basically correct but has minor flaws.</td>
<td>Response is basically complete, but some aspects are unclear.</td>
</tr>
</tbody>
</table>

NON-PROFICIENT RESPONSES: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Graph model</th>
<th>Explanation</th>
<th>Digraph/critical path</th>
<th>Conflict</th>
<th>Conflict explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>A graph model is attempted but has major flaws.</td>
<td>Response is attempted, but description of graph model is muddled.</td>
<td>An incorrect digraph is presented.</td>
<td>The conflict graph is attempted but has major flaws.</td>
<td>Response is attempted, but conflict explanation is muddled.</td>
</tr>
<tr>
<td>1</td>
<td>A graph model is attempted but it is unclear what is represented.</td>
<td>Response is minimal.</td>
<td>A digraph/critical path is attempted, but not completed.</td>
<td>The conflict graph is attempted, but not completed.</td>
<td>Minimal response.</td>
</tr>
<tr>
<td>0</td>
<td>The student makes no attempt at solving the problem.</td>
<td>The student’s work and comments are completely off-task.</td>
<td>The student’s work is illegible.</td>
<td>The student simply restates the problem with no original work.</td>
<td></td>
</tr>
</tbody>
</table>
PROFICIENT RESPONSES: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

4  Area/perimeter  The estimates of the area and perimeter and the solutions are all correct.
    Symmetry  The lines of symmetry are correct.
    Shapes/surface area  Space shape is correctly named and drawn. Surface area is correctly calculated.

3  Area/perimeter  Area and perimeter estimates basically correct with minor flaws.
    Symmetry  The lines of symmetry are basically correct with minor flaws.
    Shapes/surface area  The space shape is correctly named but drawn with minor flaws, or surface area is calculated with minor flaws.

NON-PROFICIENT RESPONSES: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

2  Area/perimeter  Area and perimeter estimates are attempted but have major flaws.
    Symmetry  The lines of symmetry are attempted but have major flaws.
    Shapes/surface area  The space shape is correctly named but drawn with minor flaws and surface area is calculated with minor flaws.

1  Area/perimeter  Area and perimeter estimates are attempted but it is unclear what is being done.
    Symmetry  The lines of symmetry are attempted but all are incorrect.
    Shapes/surface area  The space shape and surface areas are attempted but not completed.

0  The student makes no attempt at solving the problem.
    The student’s work and comments are completely off-task.
    The student’s work is illegible.
    The student simply restates the problem with no original work.
### Proficient Responses: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Graph</th>
<th>Rule (Equation)</th>
<th>Table/graph</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>An appropriate graph is labeled and scaled correctly.</td>
<td>A correct rule (equation) is presented.</td>
<td>A correct table is presented with a corresponding graph that is correctly labeled and scaled.</td>
<td>A correct prediction is made using the rule.</td>
</tr>
<tr>
<td>3</td>
<td>An appropriate graph is constructed with minor flaws.</td>
<td>A basically correct rule (equation) is presented.</td>
<td>Both the table and the corresponding graph have minor flaws.</td>
<td>A basically correct prediction is made using the rule.</td>
</tr>
</tbody>
</table>

### Non-Profitent Responses: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Graph</th>
<th>Rule (Equation)</th>
<th>Table/graph</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>A graph is attempted but has major flaws.</td>
<td>A partial or incorrect rule (equation) is presented.</td>
<td>Both the table and the corresponding graph have major flaws.</td>
<td>An incorrect prediction is presented.</td>
</tr>
<tr>
<td>1</td>
<td>A graph is presented but it is unclear as to what the graph represents.</td>
<td>A minimal rule (equation) is presented.</td>
<td>A table is attempted but it is unclear how answers were obtained; corresponding graph is labeled and scaled incorrectly.</td>
<td>An prediction is presented without using the rule.</td>
</tr>
<tr>
<td>0</td>
<td>The student makes no attempt at solving the problem.</td>
<td>The student’s work and comments are completely off-task.</td>
<td>The student’s work is illegible.</td>
<td>The student simply restates the problem with no original work.</td>
</tr>
</tbody>
</table>
## Scoring Rubric

### PROFICIENT RESPONSES: Reflect confident command of mathematics knowledge and skills in interpreting, solving, and documenting problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Simulation</th>
<th>Trials</th>
<th>Histogram</th>
<th>Prediction</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>An applicable simulation method is described.</td>
<td>Trials are correctly conducted and recorded in the frequency table.</td>
<td>Histogram is correctly presented and labeled.</td>
<td>A correct prediction is made using the frequency table.</td>
<td>Responses are complete with clear explanations.</td>
</tr>
<tr>
<td>3</td>
<td>An applicable simulation method is described.</td>
<td>Trials are basically correct and recorded in the frequency table.</td>
<td>A basically correct histogram is presented.</td>
<td>A basically correct prediction is made using the frequency table.</td>
<td>Responses are basically complete with some unclear explanations.</td>
</tr>
</tbody>
</table>

### NON-PROFICIENT RESPONSES: Reflect inadequate use of mathematics knowledge and skills and little success in exploring, solving, and responding to problem situations.

<table>
<thead>
<tr>
<th>Score</th>
<th>Simulation</th>
<th>Trials</th>
<th>Histogram</th>
<th>Prediction</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>An inappropriate simulation method is described.</td>
<td>Trials are incorrectly performed and/or recorded in the frequency table.</td>
<td>A histogram is presented, but is incomplete or has major flaws.</td>
<td>A prediction is attempted, but not correct.</td>
<td>Responses are minimal.</td>
</tr>
<tr>
<td>1</td>
<td>An simulation method is described, but it does not apply to this situation.</td>
<td>Trials are not attempted.</td>
<td>A histogram is attempted, but it is unclear what the histogram represents.</td>
<td>No prediction is made.</td>
<td>Responses are nonexistent.</td>
</tr>
<tr>
<td>0</td>
<td>The student makes no attempt at solving the problem.</td>
<td>The student’s work and comments are completely off-task.</td>
<td>The student’s work is illegible.</td>
<td>The student simply restates the problem with no original work.</td>
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</table>

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