

IQA Potential of the Task Rubric

4	<p>The task has the potential to engage students in complex thinking or in creating meaning for mathematical concepts, procedures, or relationships.</p> <p>The task <i>must explicitly prompt</i> for evidence of students' reasoning and understanding. For example, the task may require students to:</p> <ul style="list-style-type: none"> • Solve a genuine, challenging problem for which students' reasoning is evident in their work on the task • Develop an explanation for why formulas or procedures work • Identify patterns and form and justify generalizations based on these patterns • Make conjectures and support conclusions with mathematical evidence • Make explicit connections between representations, strategies, or mathematical concepts and procedures • Follow a prescribed procedure in order to explain or illustrate a mathematical concept, process, or relationship
3	<p>The task has the potential to engage students in complex thinking or in creating meaning for mathematical concepts, procedures, or relationships.</p> <p>However, the task does not warrant a level 4 rating because it does not explicitly prompt for evidence of students' reasoning and understanding. For example, students may be asked to:</p> <ul style="list-style-type: none"> • Engage in problem solving, but for a task that provides minimal cognitive challenge (for example, a problem that is easy to solve) • Explore why formulas or procedures work, but not to provide an explanation • Identify patterns, but not to explain generalizations or provide justification • Make conjectures, but not to provide mathematical evidence or explanations to support conclusions • Use multiple strategies or representations, but not to develop connections between them • Follow a prescribed procedure to make sense of a mathematical concept, process, or relationship, but not to explain or illustrate the underlying mathematical ideas or relationships
2	<p>The potential of the task is limited to engaging students in using a procedure that is either specifically called for, or its use is evident based on prior instruction, experience, or placement of the task.</p> <ul style="list-style-type: none"> • There is little ambiguity about what needs to be done and how to do it. • The task does not require students to make connections to the concepts or meaning underlying the procedure they are using. • The focus of the task appears to be on producing correct answers rather than developing mathematical understanding (for example, applying a specific problem-solving strategy or practicing a computational algorithm).
1	<p>The potential of the task is limited to engaging students in memorizing; note taking; or reproducing facts, rules, formulas, or definitions. The task does not require students to make connections to the concepts or meanings that underlie the facts, rules, formulas, or definitions they are memorizing or using.</p>

Source: Adapted from Boston, 2017.