

Illustrative Mathematics Task Review Criteria

1. The task [illustrates](#) the specified standard, cluster, domain, or conceptual category.

An **illustration** is a set of tasks that clarify the intention, depth, breadth, meaning, or faithful implementation of a standard, cluster, or domain, or conceptual category. No single tasks can illustrate a standard by itself, so this criterion is met if the task is appropriate to include as part of a complete illustration.

2. The task's [purpose](#) is clearly stated in the commentary and is likely to be fulfilled.

We will call the mathematical idea and/or habit of mind that a task is intending to develop or assess, along with its intended use, the **purpose** of the task. Here are some examples of tasks with well-stated purposes:

- <http://illustrativemathematics.org/content-standards/tasks/656>
- <http://illustrativemathematics.org/content-standards/tasks/534>
- <http://illustrativemathematics.org/content-standards/tasks/631>

Here are examples of stated “purposes” which are not sufficient:

“The purpose of the task is to illustrate standard X” because this is redundant.

“The purpose of the task is for students to learn standard X” because it is not well-defined.

3. The task has at least one appropriate [solution](#).

The **solutions** for tasks should be mathematically correct and reflect the kind of reasoning students could be expected to show. Please indicate if there are other possible solutions that should be included.

4. The [mathematics](#) is correct.

A task must be **mathematically correct** in the context of the Common Core State Standards. For example, it is common to say that the ratio of boys to girls is $\frac{2}{3}$, but tasks for grades 6 and 7 should only use colon notation 2:3 for ratios because $\frac{2}{3}$ is a number (which can be interpreted as the associated *unit rate* for the ratio 2:3).

5. Any diagrams or [pictures](#) have a clear mathematical or pedagogical purpose.

Tasks should only **include diagrams, pictures, or illustrations** that support comprehension of or provide mathematical meaning for the problem. If a diagram is meant to represent a quantity (such as a tape diagram or number line) it should be well-labeled so that its interpretation is not ambiguous. Please see the Illustrative Mathematics style guide for examples.

6. The [context](#) supports the purpose of the task.

Contexts can be either mathematical or real-world, and they can play different roles in different tasks. Contexts can variously:

- Support students in understanding the mathematics,
- Motivate students to work on the mathematics,
- Provide an opportunity to apply their knowledge in a novel context.

Sometimes tasks include a context that doesn't serve any purpose. We call these "phony contexts." No tasks in the Illustrative Mathematics task bank should have a phony context. Often it is helpful to clarify the purpose of the context (in addition to the purpose of the task itself) in the task commentary.

7. The task write-up appropriately addresses [units and numerical precision](#).

While one might argue that attending to **units and numerical precision** could fall under the rubric of being mathematically correct, it is such a common problem in tasks and so easily overlooked that it has been explicitly included.

8. The language of the task is [unambiguous](#) and grade-appropriate.

In some cases, the purpose of a task is to require students to take a context that does not have an unambiguous mathematical interpretation and make a choice about what mathematical interpretation would be appropriate (for example, in a very complex modeling task, there may be more than one reasonable mathematical model). However, **the language of the task should not be ambiguous** in any case.

Illustrative Mathematics is a discerning community of educators dedicated to the coherent learning of mathematics. We collaborate at www.illustrativemathematics.org, sharing carefully vetted resources for teachers and teacher leaders to give our children an understanding of mathematics and skill in using it. We provide expert guidance to states and districts working to improve mathematics education.