

XQ Math Badging System: Guidance for Curriculum Alignment

How to use this document: This document is designed to support educators and educator leaders in aligning their math curriculum to the XQ Math Badging System. Whether you are using a standard curriculum or developing your own lessons, this alignment process helps ensure your instruction reflects high-quality learning experiences rooted in meaningful mathematics.

The goal of this tool is to make the alignment process practical and flexible. The XQ Math Badging System's (XQ-MBS) Content and Practice Expectations (CPEs) are standards aligned and prioritize the major work of each topic. By mapping your lessons and tasks to the XQ-MBS Learning Principles (LPs) and each badge's CPEs, you will surface opportunities to create student-centered learning experiences that highlight the most important mathematics of the badge.

Why This Matters: This alignment process is more than a compliance exercise. It helps create intentional, engaging math experiences where students:

- Tackle challenging problems,
- Work together to make sense of math,
- See math as connected to real life and history,
- Use technology effectively,
- And build confidence and agency in their learning.

Providing these experiences helps to ensure that students are not only meeting standards but also growing as mathematicians who can thrive in a variety of future pathways.

Instructions

1. **Start with the badge:** Begin by identifying the badge you want to align with. Review the badge title and description in the Badge Catalog to understand the key competencies and learning outcomes.
2. **Clarify standards alignment:** Refer to the **CPEs** and **LPs** associated with the badge to guide your evaluation of curriculum alignment.
3. **Refer to your curriculum:** Locate the unit or set of lessons you are currently teaching or plan to teach. Use these as the foundation for your alignment work.
4. **Evaluate each lesson or task:** For each lesson or activity, assess its alignment with the badge, CPEs, and LPs. Use the following codes to classify alignment:
 - **K = Keep** – Strong alignment to the CPEs and LPs. No major changes needed.
 - **M = Modify** – Partial alignment but could be strengthened with small adjustments.
 - **D = Delete** – Limited or no alignment; consider replacing or redesigning.

Instructions:

Use the table below to identify and align content units, tasks, or activities to the badge CPEs. Three examples are provided (you may delete as you complete the table) of an alignment created between badge M153: Reasoning and Proof through Similarity and a curriculum unit (Illustrative Mathematics–Geometry Unit 3: Similarity). In these samples, we have noted one example where the content aligns directly to badge CPEs and LPs, another where the content is not aligned (and therefore could be skipped), and a third example where some modification was recommended.

You may remove these sample rows as you populate your own alignment.

Unit or Lesson Context Math Focus	K = Keep M = Modify D = Delete	Applicable Content and Practice Expectations (CPE)	Applicable Learning Principles (LPs)
<i>Sample (keep):</i> Unit: IM Geometry Unit 3.1 Context: Builds on student understanding of images, using common knowledge of scaled and distorted images Math focus: Scale drawings, dilations	K	153.a.i 153.a.ii	LP2, LP7
<i>Sample (delete):</i> Unit: IM Geometry Unit 3.2 (Listed as an optional lesson by authors.) Context: Scale drawing of the planets Math focus: Creating and interpreting scaled drawings of figures	D	Delete: Doesn't align to any badge CPEs	
<i>Sample (modify):</i> Unit: IM Geometry Unit 3.3 Context: All mathematical context; no real-life context used Math focus: Creating dilations given a scale factor and looking at the effect on side lengths	M	Consider asking students to describe the effect of the dilations on the angles within this lesson to address CPE 153.c.ii. 153.a.i 153.a.ii 153.c.i 153.c.ii 153.e.iii 153.e.iv	LP2, LP4, LP7

Lesson	K = Keep M = Modify D = Delete	Applicable Content and Practice Expectations (CPE)	Applicable Learning Principles (LPs)