Kentucky Academic Standards for Mathematics
At a Glance

Focused highlights:

1. The **Writers Vision** is stated on page 5 of the draft *KAS for Mathematics.*
    a. Aligns with SB 1 requirements and public feedback.

2. **Design Considerations** are detailed on pages 6-8 of the draft.

3. **Architecture** provides grade level overview chart at the beginning of each grade level, followed by standard breakdown which includes grade level domains and clusters (beginning on page 15).
    a. Viewed 14 state models.
    b. Aligns with SB1 requirements and public feedback.

4. The **Standards for Mathematical Practice** describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. Pages 11-14 detail the eight practices, and page 14 explains the connection between the content standards and the practice standards. Beginning with the standard level breakdown on page 16, the writers highlighted possible connections with each content standard, as well as provided cluster level examples of what this relationship may look like in the classroom.

5. The **Content Standards** focus on critical knowledge, concepts, and skills students should acquire at each grade level. Beginning on page 16, the content standards are located on the left hand side of each page.
    a. Elementary
        i. Intentional alignment to research-based early numeracy trajectories
        ii. Responding to public feedback, the writers included standards beginning in Kindergarten to introduce coins and money. See pages 26, 41, and 56.
        iii. Many standards are bulleted with illustrations and examples provided. See pages 86 and 87.
    b. Middle School
        i. Standards to support a strong foundation in statistics were added in the middle grades. These standards begin on pages 134, 149, and 169.
        ii. In response to public feedback, clarifications and standards for mathematical practice were identified with each standard to communicate the expectation of the standard more clearly and identify opportunities to explore deeper understanding of the standard. See page 121.
    c. High School
        i. Calculus standards are new to the KAS for Mathematics and begin on page 240.

ii. Calculus is the only course identified in the high school standards. The remainder of the standards are identified by conceptual category. This allows districts to organize the standards by a traditional or integrated pathway.
iii. Many standards are bulleted with clarifications included to communicate the meaning of the standard more clearly. See pages 190 and 191.

6. **Clarifications** are included to communicate expectations of the standards more clearly and concisely to teachers, parents, students and stakeholders through examples and illustrations. In the standards level view, the clarification section is located on the right hand side of each page throughout the document. This begins on page 16.

7. The standards are sequenced to make mathematical sense and are based on the progressions for how students learn. To emphasize the cohesiveness of the K-12 standards, the writing team included **Coherence/Vertical Alignment** indicating a mathematics connection within and across grade levels. Using research from other state architectures, the writing team included the coherence within the clarification section by identifying the standard codes printed in red. This can be found beginning on page 16.