

The Revised Math TEKS (Grades 9-12): Applying the Mathematical Process Standards

This is the second of four modules to introduce the revised TEKS for grades 9 - 12. The goals for participation are to become familiar with the mathematical process standards that are new to the high school TEKS, to explore resources on the Texas Gateway, and to amplify instructional tasks. CPE credit is 3.

Introduction

This lesson presents a brief overview and organizational framework of the course.
(Estimated time: 10 min.)

Exploring the Mathematical Process Standards

Examine the process standards through the lens of four big ideas.
(Estimated time: 15 min.)

Mathematical Process Standards Summary

Summarize what you have learned about the mathematical process standards.
(Estimated time: 35 min.)

Building Depth and Complexity

Reflect on the multiple connections that need to be made for students to build a strong mathematics network.
(Estimated time: 15 min.)

Amplifying Instructional Tasks

Review the considerations when amplifying tasks and vocabulary related to meeting the needs of all students.
(Estimated time: 20 min.)

Cross-Disciplinary Instruction and the ELPS

Reflect on your level of understanding of the ELPS and your comfort level with designing instruction that is cross-disciplinary and allows for multiple entry points.
(Estimated time: 10 min.)

Bringing It All Together

Consider the implications for students' acquisition and demonstration of their mathematical understandings related to content and process standards.
(Estimated time: 10 min.)

Digging Deeper into Amplified Tasks

Examine samples of amplified tasks and record evidence of the mathematical process standards, the ELPS, multiple entry points, and cross-disciplinary instruction in the matrix in your journal.
(Estimated time: 30 min.)

Exploring the Texas Gateway

Explore new resources found on the Texas Gateway and look for evidence of the mathematical process standards within the activities found on the Gateway.
(Estimated time: 30 min.)

Amplifying Tasks: Your Turn

Choose one problem from the Original Problems document. Amplify the task and complete the matrix in your journal. (Estimated time: 30 min.)

Conclusion

Reflect on what you have learned in this module and review the other modules available in the Revised Math TEKS series.

(Estimated time: 5 min.)

List of Course Activities – The Revised Math TEKS (Grades 9-12): Applying the Mathematical Process Standards

Use this checklist to track the completion of activities in the course.

Introduction

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| <input type="checkbox"/> View the Introduction and Welcome video and download the interactive journal. | Video: 01:20 min.
Activity: 10:00 min. |
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Exploring the Mathematical Process Standards

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| <input type="checkbox"/> View the videos about examining the mathematical process standards through the lens of four big ideas and respond to questions in your journal. | Videos: 02:21 min.
Activity: 20:00 min. |
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Mathematical Process Standards Summary

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| <input type="checkbox"/> Complete the mathematical process standards summary activity in your journal. | Activity: 10:00 min. |
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Building Depth and Complexity

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| <input type="checkbox"/> View the video and reflect on the question. | Video: 01:21 min. |
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Amplifying Instructional Tasks

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| <input type="checkbox"/> View the videos to review considerations for amplifying an instructional task. Complete the interactive trivia. | Videos: 03:37 min.
Activity: 20:00 min. |
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Cross-Disciplinary Instruction and the ELPS

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| <input type="checkbox"/> View the videos, complete the vocabulary notes activity, and reflect on the questions. | Videos: 02:14 min.
Activity: 15:00 min. |
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Bringing It All Together

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| <input type="checkbox"/> View the video and record your thoughts in your journal. | Videos: 01:03 min.
Activity: 10:00 min. |
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Digging Deeper into Amplified Tasks

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| <input type="checkbox"/> View the videos and download the tasks for your grade band. Complete the activity in your journal. | Videos: 04:36 min.
Activity: 30:00 min. |
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Exploring the Texas Gateway

Explore resources on the Texas Gateway and complete the activity in your journal.

Activity: 30:00 min.

Amplifying Tasks: Your Turn

View the videos, download the Original Problems document, and choose a problem to amplify to complete the matrix in your journal.

Videos: 03:39 min.

Activity: 30:00 min.

Conclusion

View the video and review the other modules available in the Introduction to the Revised Mathematics TEKS series.

Video: 00:52 min.