

# A MINUTE IN MATHEMATICS

THE MDE MATHEMATICS NEWSLETTER

SEPTEMBER 2022

[MDE MATHEMATICS WEBPAGE](#) | [MS MATH EDUCATOR LISTSERV](#) | [MATH DIRECTOR CONTACT](#)

## THE MDE RELEASED THE MATHEMATICS INSTRUCTIONAL OBSERVATION PROTOCOL (MIOP): GRADES 3-12, JUNE 2022

The MIOP provides key indicators and evidence of effective practice that administrators should look for when conducting observations, such as “Learning Walks” or “Walk-throughs” of a mathematics classroom.

Click [here](#) for a copy.

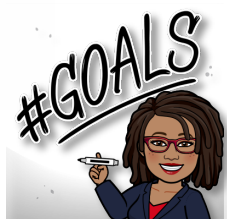
### SEPTEMBER 2022

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### OCTOBER 2022

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## MONTHLY MATH DIRECTORS T.I.P. (TEACHING INSTRUCTIONAL PRACTICE)



In August, we began our yearly focus on the National Council for Teachers of Mathematics (NCTM) Eight Effective Mathematics Teaching Practices with **Practice #1: Establish mathematics goals to focus learning.** Several goals are considered when planning instruction,

engagement, performance, assessment, etc. But the key term in this EMTP is “**mathematics.**” One misconception is that math goals for the lesson are the same as the standard or the standard with the phrase “I can” preceding it. But instead, the math goal is the measurable outcome of the learning students should obtain from that particular lesson. Math goals should establish a coherent progression of learning to build the students through each aspect of rigor: conceptual understanding, procedural skill and fluency, and application, as required by the standard.

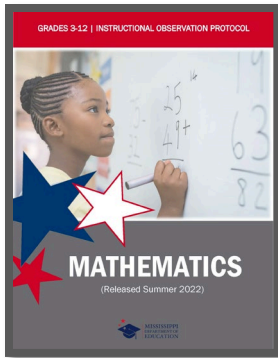
The Mathematics Instructional Observation Protocol (MIOP) outlines the following “look fors” of effective implementation of EMTP #1, which involves the teacher:

1. articulating the mathematics students are to learn.
2. identifying how the goal will fit into the learning progression.
3. discussing, referencing, and revisiting the purpose of the goal and its contribution to the learning throughout the lesson.
4. using the mathematics goal to guide lesson planning reflection and to make purposeful in-the-moment decisions.

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“Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.” -*Principles to Actions: Establishing Mathematical Success for All* (2014)

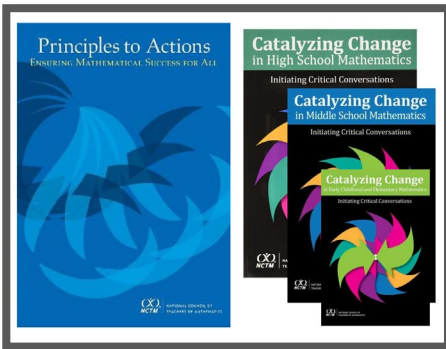
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## FOUR ADDITIONAL IN-PERSON TRAINING SESSIONS FROM SEPTEMBER -DECEMBER 2022

The MDE has arranged to offer four additional in-person training sessions monthly, on September 12, October 13, November 10, and December 5. Registration for all sessions is open and will close three days before the event. To register or for more information on the events, visit [GoSignMeUp](#).

**NOTE: Administrators are encouraged to attend with their math content lead, though it is not a requirement for attendance.**



## CANVAS BOOK STUDIES CONTINUE IN FALL 2022 (SEPTEMBER 12-NOVEMBER 11)

**NOTE: Participants will be responsible for obtaining a copy of the text.**

The MDE is continuing to offer book study opportunities on NCTM's Principles to Action text released in 2014 and the Catalyzing Change Trilogy: Early Childhood and Elementary (2020), Middle (2020), and High School (2018). These texts build on the principles and practices articulated in Principles and Standards for School Mathematics (NCTM, 2000) to offer six **updated** Guiding Principles for School Mathematics and specific teaching practices essential for high-quality mathematics education for **all**

students. These works address practical [recommendations](#) to help create positive change, invoke critical conversations among instructional leaders and stakeholders in mathematics education, and strengthen their school mathematics program. Click [here](#) to register.



## VIRTUAL PLC "MATH TALKS" HOSTED ON SEPTEMBER 20

This school year, the Balancing the Equation series will feature NCTM's [Eight Effective Teaching Practices](#) for Mathematics Instruction as outlined in the 2014 *Principles to Actions* text. This month's session will take place on September 20, from 3:30 – 4:30 pm, and is dedicated to Effective Mathematics Teaching Practice #2: **Implement math tasks that promote reasoning and problem-solving**. Be prepared to engage in content for your grade band. Registration opened on August 24 and will end on September 16, 2022. Click [here](#) to sign-up. Remember, "balance is not something you find; it is something you create." – Jana Kingsford.



## ZEARN HOSTS CATCHING UP AND MOVING FORWARD: ACCELERATING MATH LEARNING FOR EVERY STUDENT

Zearn, the 501(c)(3) nonprofit educational organization behind Zearn Math, is hosting a live webinar for grades K-2 on September 13, 3-5 on September 14, and 6-8 on September 15 at 3 pm CST, to explore how anchoring new math learning in a few big ideas gives all students a way into grade-level math. We'll dive into specific math examples to see how Zearn digital lessons scaffold learning with real-world context, visual representations, and just-in-time support to help students catch up on unfinished learning in grade-level math. To learn more, click [here](#).

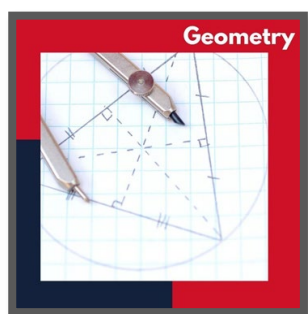


## CENTER FOR MATH AND SCIENCE EDUCATION (CMSE) HOSTS THE 2022 MATHEMATICS SPECIALIST CONFERENCE



Since 2011, the CMSE has hosted the Mathematics Specialist Conference as an opportunity for K-12 mathematics teacher leaders to come together to share their knowledge and experiences. If you serve your school or district as a math or science specialist, lead teacher, content coach, or any other instructional leadership role, we invite you to attend the 2022 CMSE Mathematics Specialist Conference.

Participants will engage in hands-on professional development, network with other instructional leaders, and investigate best practices to take back to their school district. Presenter proposals will be accepted until August 31, 2022. Registration ends on October 17, 2022. For more information, click [here](#).



### CMSE HOSTS THE MIDDLE MATH INSTITUTES: GEOMETRY, SEPTEMBER 12-NOVEMBER 4

The CMSE Middle Math Institutes are designed to engage educators in dissecting, understanding, and making connections to the mathematics content taught in grades 6-8. Participants will gain a conceptual understanding of mathematics across all domains taught in the middle grades, learn to connect to students' previously learned mathematics skills, and explore strategies to engage students effectively in the mathematics learning process.

Educators will be eligible for 2.4 CEUs for each content institute. Successful completion of all four institutes will allow Mississippi educators to apply for a Supplemental Endorsement in Middle-Level Mathematics (Endorsement Code – 901). For more information, click [here](#).



### FIRST-YEAR TEACHERS ARE ELIGIBLE FOR STUDENT LOAN REPAYMENT

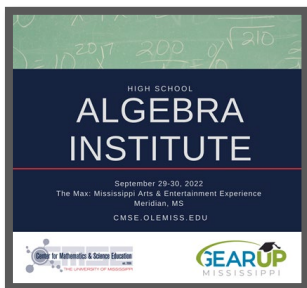
The Winter-Reed Teacher Loan Repayment Program (WRTR) is designed to help traditional route teachers repay their undergraduate student loans. Those serving in a geographical critical shortage area may be eligible for up to \$15,000 for three years of service. Those in non-shortage areas may be eligible for up to \$7,500 for three years of service. Applications will be accepted through September 15. All required documents must be submitted by October 15, 2022. A total of 150 first-year teachers will be chosen each year, with priority given to geographical critical shortage area teachers. See program regulations and application details [here](#).





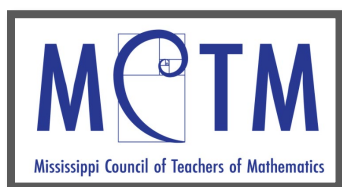
## CMSE HOSTS THE HIGH SCHOOL ALGEBRA INSTITUTE ON SEPTEMBER 26

The Mississippi Forge Forward Summit aims to bring together representatives from the defense industry, manufacturing, government, and education for a unique collaborative opportunity. This one-day summit will engage industry and education partners in critical conversations around preparing Mississippi's workforce to meet the needs of the 21st Century defense industry. For more information, click [here](#)—CEUs are available.



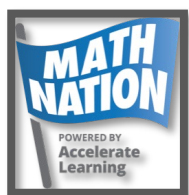
## CMSE HOSTS THE HIGH SCHOOL ALGEBRA INSTITUTE, SEPTEMBER 29-30

Algebra serves as a bridge between students' early computation learning and real-world applications. In this two-day session, participants will explore algebra content, including equations, functions, and statistical applications, through hands-on activities that can be taken back to their classrooms. Teachers will also investigate ways to engage students in the Standards for Mathematical Practice and reflect on effective mathematics teaching practices that elicit student thinking. For more information, click [here](#).



## REGISTRATION IS NOW OPEN FOR THE MISSISSIPPI COUNCIL OF TEACHERS OF MATHEMATICS (MCTM) FALL CONFERENCE

The MCTM will be hosting its Fall 2022 conference, "*Math in Context: A Spoonful of Context Helps the Content Go Down*," on October 21-22, 2022, at Northwest Rankin High School in Flowood, MS. If you would like to connect and network with other educators from across the state, click on "[Conference Registration](#)" to begin the registration process. CEUs will be available! For more information or questions, contact [mctm@gmail.com](mailto:mctm@gmail.com) or visit <https://www.mctmonline.com/>.



## MATH NATION APPROVED FOR THE 2022-2023 SY

Math Nation is excited and grateful to announce the approval of legislative funding for the 2022-2023 school year. The funding includes full digital access to Math Nation's 6-8th grade, Algebra 1, Geometry, Algebra 2(FL), ACT/SAT, On-Ramp remediation tools, and all printable PDF/Word resources.

Algebra 1 and Geometry workbooks are available at no cost to **ALL** Mississippi public schools. To place your order for FREE workbooks, log in to [MathNation.com/MS](https://MathNation.com/MS) with your district credentials and click on the "Order Workbooks" button in the Teacher Area. For assistance with integration/platform questions, to schedule free professional development, order workbooks, or to obtain district credentials, contact Sara Flowers at [sara@mathnation.com](mailto:sara@mathnation.com).





## STEMSCOPES OFFERS FREE K-8 STEM ACTIVITIES

STEMscopes has a few hands-on explorations and activities for elementary and middle school pulled straight from their STEM curriculum. STEM activity packs include hands-on activities for the classroom or home, K-8 projects centered around science, math, engineering, and coding, and readings and comprehensive questions paired with STEM activities (some offered in Spanish). To download your free copy, click [here](#).



## AMPLIFY OFFERS FREE INSTRUCTIONAL ROUTINE CARDS

Amplify's math program's instructional routines help bring structure and consistency to the classroom. Each card features an easy-to-implement practice to keep students interacting and engaged with the lesson. To download your free copy, click [here](#).



## FREE ACT COLLEGE AND CAREER READINESS WORKSHOPS

Beginning August 9 and continuing throughout the fall, ACT offers free, online ACT College and Career Readiness Workshops. This includes national and state-specific webinars, as well as in-person events. To learn more and register, click [here](#).



## UWORLD COLLEGE READINESS OFFERS SUPPLEMENTAL RESOURCES TO SUPPORT COLLEGEBOARD'S AP CLASSROOM

Is your district looking for additional resources to supplement College Board's AP Classroom? If so, UWorld's Learning Tools for AP Courses may be the solution for which you are looking. To learn more, click [here](#) to access UWorld's blog entitled *"How Do UWorld's Learning Tools for AP® Courses Work in Conjunction with AP Classroom?"*



## COLLEGE BOARD ADVANCE PLACEMENT MATHEMATICS TEACHER RESOURCES

Are you currently teaching an AP course? If so, take the time to become familiar with the valuable resources and information AP College Board provides. These links will take you to a wealth of Advanced Placement resources.

[AP Central- Mathematical Practices for AP Calculus \(MPACs\)](#), [AP Central- AP Calculus AB Essential Resources](#), [AP Central- AP Calculus BC Essential Resources](#), [AP Central- AP Statistics Essential Resources](#)

