

# Making Best Use of DESMOS to Strengthen Your MATH Instruction (Grades 6-12)



A Unique One-Day Live Online Seminar Presented by

## Rachel Mane

Outstanding Secondary Math Teacher  
and National Presenter

**Specifically Designed for Grades 6-12 Mathematics Teachers;  
Teachers of General Math, Algebra, Geometry, Pre Calculus, Calculus,  
Statistics; Math Curriculum Coordinators and Administrators**

**Dozens of practical strategies for best utilizing FREE Desmos** to strengthen your secondary Math students' engagement and learning

**How to make best use** of Desmos Calculator and Activity Builder to greatly enhance your grades 6-12 math instruction

**Explore highly practical ways you can use Desmos** on Chromebooks, computers, iPads, and mobile devices to increase your students' success

**Receive an extensive digital resource handbook** and special online access so you can immediately link to the resources presented in this seminar

### Live Online Seminars

**October 26**

**9 AM Central**, 8 AM Mountain,  
7 AM Pacific, 10 AM Eastern

**November 1**

**9 AM Eastern**, 8 AM Central,  
7 AM Mountain, 6 AM Pacific

CEUs and Graduate Credit Available  
See page 6 for details

#### CAN'T ATTEND?

Order the recorded version  
and take the seminar online at  
your convenience (see page 6)

*"Very informative.  
I'm excited to use this  
in my classroom."*

ANDREW MAYLE, HIGH SCHOOL  
MATHEMATICS TEACHER

# Ten Key Benefits of Attending

*"This was so useful!  
I learned some  
basic functionality  
I didn't know  
about and I  
learned some  
more advanced  
functionality I can  
start implementing  
right away."*

– TERESA ALFUTH,  
MATH TEACHER



## Who Should Attend

Grades 6-12 Mathematics  
Teachers; Teachers of  
General Math, Algebra,  
Geometry, Pre Calculus,  
Calculus, Statistics; Math  
Curriculum Coordinators  
and Administrators

- 1. Strengthen Your Math Instruction with FREE Desmos**  
What every grades 6-12 math teacher needs to know about fully tapping into Desmos and Desmos Activity Builder ... The best, most useful aspects for strengthening your math instruction
- 2. Generate Excitement and Increase Student Motivation**  
Explore high interest, practical Desmos activities that spark students' curiosity and strengthen their perseverance in problem solving
- 3. Quickly Adapt Premade Desmos Lessons or Create Your Own**  
Save time and incorporate or quickly adapt premade Desmos lessons perfect for your math students ... Learn the keys to building outstanding Desmos lessons and how to easily create your own
- 4. Utilize the Newest Features of Desmos Calculator and Activity Builder**  
Desmos is constantly improving and adding features in response to teacher feedback ... Leverage the newest features of Desmos, perfect for your grades 6-12 math instruction
- 5. Differentiate Instruction and Help Students Move from Concrete to Abstract**  
Incorporate activities that strengthen concept building by allowing students to advance when they are ready ... Discover ways to challenge and engage highly capable students so you can focus more on the students who need you most
- 6. Essential Desmos Features to Help Students to Explore Mathematical Ideas**  
Discover and create dynamic tables, graphs and sliders students can use to make predictions, notice patterns, revise conjectures, construct understanding, and more!
- 7. Use Desmos to Help Students Adopt a Growth Mindset**  
Enable students to adopt a growth mindset and value mistakes in the learning process ... Explore ways to help students refine their thinking before formalizing the math concepts they are learning
- 8. Strengthen Students' Mathematical Vocabulary and Written Expression**  
Explore multiple lessons that develop students' accuracy in their mathematical communication ... Help your students refine their explanations based on feedback they see in a Desmos Activity Builder lesson
- 9. The Best Desmos Tips and Shortcuts to Streamline Your Instruction**  
Explore time saving shortcuts to make your instruction more productive ... Practical ways to make demonstrations faster and easily save your work from one class to the next
- 10. Receive an Extensive Digital Resource Handbook with Special Online Access to Additional Resources**  
You will receive a digital resource handbook packed with ideas, suggestions and instructions for using Desmos to enhance your math instruction

# Outstanding Strategies You Can Use Immediately

## What You Will Learn ...

- **Practical strategies for making best use of Desmos Calculator and Activity Builder** to enhance instruction and student engagement in your math classroom
- **Premade Desmos Activity Builder lessons** you can instantly incorporate or easily adapt to enhance your mathematics instruction
- **How to help students test conjectures** and investigate mathematical relationships
- **Ways to find, curate and share collections** of Desmos activities with your colleagues
- **Numerous ideas and lessons to fully engage** your math students in productive, collaborative learning
- **Classroom-tested Activity Builder lessons** designed to increase your students' growth mindset for learning mathematics
- **Ways to use Desmos in a single and multi-device environments**, including Chromebooks, laptops, iPads, and mobile devices
- **Strategies for maximizing student learning** with the teacher dashboard including pacing, anonymizing and pausing within a lesson
- **Explore multiple calculator features** including tables, graphs, sliders, geometry, polar, parametric, lists, statistics, and more!
- **Valuable tips, shortcuts and ideas** for organizing and sequencing learning to maximize instructional time
- **Activities that move students from concrete to algebraic thinking** and encourage them to predict, test and analyze their thinking throughout the process



*"Everything was shared with excellent pacing and clarity. I have taught for many years and have never had 5 hours of training that has been so rich in relevant content."*

– BRAD WEEKS, JR/SR HIGH MATH TEACHER

## Practical Ideas and Strategies

This outstanding seminar is specifically designed for secondary mathematics educators who want to make best use of the FREE Desmos calculator and Desmos Activity Builder lessons to greatly enhance mathematics learning and instruction. Experienced secondary mathematics teacher **RACHEL MANE** will share practical, effective ways to use Desmos to build strong conceptual understanding and increase student success in math. Enable students to deepen learning by constructing their own mathematical understanding. Increase students' confidence in their mathematical abilities, especially when faced with new concepts or challenging questions. Discover how Desmos online calculator is much more than just a replacement for a handheld device. Learn how to help students become mathematicians with Desmos – to conjecture, test ideas, notice and wonder, productively learn from mistakes, make connections between algebraic and graphical representations, and much more! **You will leave this seminar with numerous practical ideas you can immediately implement to greatly enhance your math instruction.**



# A Message From Seminar Leader, Rachel Mane



## Uniquely Qualified Instructor

**RACHEL MANE** is a highly experienced secondary math educator and a frequent presenter at local, state and national seminars, often speaking on best ways to use technology to increase student engagement in the math classroom. Rachel is passionate about equipping fellow secondary math teachers with innovative, practical tools and ideas they can immediately use in their classrooms. Rachel is also passionate about helping educators discover the joy of learning mathematics that can happen when students use Desmos for exploration and creation. Rachel is often publishing blogs and videos on technology and high yield classroom strategies. She is also the author of *Making Best Use of DESMOS to Strengthen Your MATH Instruction*, the extensive digital resource handbook each participant will receive at the seminar. **Join Rachel for an outstanding day full of specific ways you can get the most out of Desmos to strengthen your grades 6-12 math instruction.**

Dear Colleague:

As secondary math educators, getting our students authentically motivated and engaged in learning mathematics can be challenging! Are you tired of students asking, "When are we going to use this?" or "Will this be on the test?" Do your students fear making mistakes or being viewed as "dumb" in front of their peers if their answer is not correct? Have you tried using handheld graphing calculators only to find students get bogged down knowing which buttons to push or what syntax to use? What I find so exciting about Desmos is that it has the power to greatly enhance our math instruction and to help us address these and so many other challenges we face.

I have specifically designed this seminar based on my years as a secondary math teacher. I am excited to share with you how to make best use of FREE Desmos to greatly enhance your math instruction. Harness the power of Desmos and Desmos Activity Builder lessons to help your students make and test conjectures, link multiple representations, draw connections between different concepts, take intellectual risks, learn from errors, use informal understanding to build formal conceptual understanding, and much more! Watch as your students' confidence, interest and enthusiasm for learning math grows.

Join me for a day filled with practical ways to make best use of Desmos to strengthen your math instruction. Increase engagement and get your students to take a more active role in their math learning. Discover how to use Desmos to answer students' "what if" questions and reinforce the relationships between algebraic and graphical representations. Explore Desmos Activity Builder from the student perspective and how to maximize student learning from the teacher dashboard. Easily build your own lessons and explore a host of pre-made Activity Builder lessons you can immediately incorporate or quickly adapt. Since Desmos is constantly changing we'll explore the latest new features and updates! Plus, you will receive my Desmos handbook, which is packed with practical resources and instructions.

Whether you are brand new to Desmos, an experienced user, or anywhere in between, this day is for you! If you have one or many Chromebooks, laptops, iPads, or computers, I want to show you how you can make the most of Desmos to strengthen your instruction and your students' learning in mathematics.

Sincerely,

Rachel Mane

P.S. I have personally witnessed how **Desmos can transform math learning**. I can't wait to show you how!

*"I am excited to share with you how to make best use of free Desmos to greatly enhance your math instruction ..."*

# What Your Colleagues Say About Rachel Mane

*"This is the type of seminar that is worth every penny – and all the time in the world to attend. So much fantastic information and such a great presenter. I rarely give ALL perfect scores on surveys, but this was totally amazing. Very organized and Rachel was very helpful and patient."*

– Melanie Carter, Mathematics Teacher

*"Rachel was energetic and passionate teaching us about DESMOS. We could sense she loves this platform. The session was very informative and it was a fascinating tour to the world of DESMOS. I'm excited to use these tools introduced today in my future classes."*

– Akifumi Iwahashi, Faculty of Mathematics/Director of Academic Logistics

*"I found this really valuable! I'm excited to bring the things I learned back to my department."*

– Robin Bowman, Math Teacher

*"I had previously used DESMOS activities, but now I can see how to put the features into creating my own activities."*

– Meghan Mattison, Math Teacher



## About BER Seminars

### Outstanding Instructors

All programs are led by outstanding, top-rated BER national trainers.

### Extensive Digital Resource Handbook

You'll receive an extensive digital Resource Handbook full of practical strategies and resources.

### Highly Interactive

You'll be able to ask questions, consult with the instructor, and share ideas with other participants.

### Program Guarantee

As we have for 45 years, we guarantee the high quality of our programs. If you are not satisfied, we'll give you a 100% refund.

# Special Benefits of Attending



"GREAT professional development opportunity! I learned so many new things to do in DESMOS with my students to increase engagement."

JAIME GARVER,  
MATHEMATICS TEACHER

## On-Site Training

Most BER seminars can be brought to your school or district in-person or online. See the options at [www.ber.org/onsite](http://www.ber.org/onsite) or call 877-857-8964 to speak to one of our On-Site Training Consultants.

## Extensive Digital Resource Handbook

Each participant will receive an extensive digital resource handbook giving you access to countless strategies. The handbook includes:

- Step-by-step guides for using Desmos to build strong conceptual understanding with your students
- Screenshots to highlight various aspects of the teacher dashboard with practical suggestions for using them to maximize student learning
- Suggested ways to use Desmos to teach concepts ranging from pre-algebra through calculus and statistics
- A reference list for specific calculator syntax
- Links to collections of activities that span secondary grade levels and courses

## Consultation Available

Rachel Mane will be available to answer your specific questions and the unique needs of your own program.

## Share Ideas with Other Educators

This seminar provides a wonderful opportunity for participants to share ideas with other educators interested in making best use of DESMOS to strengthen their Grades 6-12 math instruction.

## Meet Inservice Requirements / Earn State CEUs

Participants of Live Online Seminars and those completing the Recorded Version online can receive a certificate of participation that may be used to verify five continuing education hours. For details about state CEUs available, visit [www.ber.org/ceus](http://www.ber.org/ceus)

## Earn One to Four Graduate Semester Credits



Up to four graduate level professional development credits are available with an additional fee and completion of follow-up practicum activities. Details may be found at [www.ber.org/credit](http://www.ber.org/credit)

## Can't Attend?

### Other Professional Development Options:



#### Recorded Version of the Seminar

A video recorded version of this seminar will be available to take online at your convenience. You'll have access to the entire course and to the extensive digital resource handbook. To enroll, see the registration form on page 7, and for optional CEUs and graduate credit, please visit [www.ber.org/credit](http://www.ber.org/credit)



#### Related On-Demand Online Courses

A related On Demand Video-Based Online Learning course, *Help Your Students Who Struggle with Mathematics: Practical, Successful Strategies*, for Grades 6-12, and *Strategies for Promoting a GROWTH MINDSET to Increase Students' Perseverance, Engagement and Success in Your MATH Classroom*, for Grades 6-12, are available for immediate registration. To enroll, visit [www.ber.org/online](http://www.ber.org/online)

# Making Best Use of DESMOS to Strengthen Your MATH Instruction (Grades 6-12)

## Registration (MD33F1)

1. **October 26, 2022** (Start time: 9 AM Central)
2. **November 1, 2022** (Start time: 9 AM Eastern)  
— or —
3. **I'd like to order the recorded version of this seminar**

FIRST NAME	M.I.	LAST NAME
_____		
POSITION, SUBJECT TAUGHT	GRADE LEVEL	
_____		
SEMINAR NUMBER: _____ (Please see list above)		

*List additional registrants on a copy of this form*

SCHOOL NAME	
_____	
SCHOOL MAILING ADDRESS	
_____	
CITY & STATE	ZIP CODE
_____	_____
SCHOOL PHONE NUMBER	HOME PHONE NUMBER
( )	( )

**Registration confirmations and login details are sent via e-mail**

E-MAIL ADDRESS (REQUIRED FOR EACH REGISTRANT)	
_____	
HOME MAILING ADDRESS	
_____	
CITY & STATE	ZIP CODE
_____	_____

**IMPORTANT – PRIORITY ID CODE: EMD33F1**

## METHOD OF PAYMENT – Team Discount Available

**The registration fee is \$279 per person,**  
for teams of three or more registering at the same time, the fee is \$259  
per person. **Payment is due prior to the program.** No cash, please.

- A check (payable to **Bureau of Education & Research**) is attached
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## FIVE EASY WAYS TO REGISTER:

 **REGISTER ONLINE** at: [www.ber.org](http://www.ber.org)

 **EMAIL this form to:** [register@ber.org](mailto:register@ber.org)

 **PHONE toll-free: 1-800-735-3503**  
(Weekdays 5:30 am - 5:00 pm Pacific Time)

 **FAX this form to: 1-425-453-1134**

 **MAIL this form to: Bureau of Education & Research**  
915 118th Avenue SE • PO Box 96068  
Bellevue, WA 98009-9668

## Program Hours

All Live Online Seminars are scheduled 9:00 a.m. – 3:30 p.m. in the time zone indicated. Check in 15 minutes prior. Registrants will be sent login information by email four days before their Live Online Seminar.

## Fee

The registration fee is \$279 per person, \$259 per person for groups of three or more registering at the same time. Call us at 1-800-735-3503 for groups of ten or more. **Payment is due prior to the program.**

Fee includes seminar registration, a certificate of participation and an extensive digital resource handbook. The fee is the same for Live Online Seminars or Recorded Seminars.

## Cancellation/Substitutions

100% of your paid registration fee will be refunded if you can't attend and notify us at least 10 days before the seminar. Late cancellations made prior to the event date will be refunded less a \$15 service fee. Substitutions may be made at any time without charge.

## Program Guarantee

We stand behind the high quality of our programs by providing the following unconditional guarantee: If you are not satisfied with this program, we'll give you a 100% refund of your registration fee.

## Further Questions

Call the Bureau of Education & Research (800) 735-3503 or visit us online at [www.ber.org](http://www.ber.org). The Bureau is North America's leading presenter of PD training for professional educators. Programs are based on sound research, are highly practical in content and consistently receive excellent evaluations.



MD33F1

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## Making Best Use of DESMOS to Strengthen Your MATH Instruction (Grades 6-12)



An outstanding one-day Live Online Seminar

Includes an extensive digital Resource Handbook

Can't Attend? Order the Recorded Version to access  
 online at your convenience

## Strengthen MATH Instruction Using DESMOS (Grades 6-12)

MD33F1



Bureau of Education & Research

## Making Best Use of DESMOS to Strengthen Your MATH Instruction (Grades 6-12)

Live Online Seminar  
 or Recorded Version



A Unique One-Day Live Online Seminar  
 (Also available as a Recorded Online Version  
 to Use at Your Convenience)

Presented by

**Rachel Mane**

Outstanding Secondary Math Teacher  
 and National Presenter

**Dozens of practical strategies for best utilizing FREE Desmos** to  
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**How to make best use** of Desmos' Calculator and Activity Builder to  
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**Explore highly practical ways you can use Desmos** on Chromebooks,  
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