



# Building on Assessment (Virtual) – Session 1

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Rev 5/15/23 (ce)

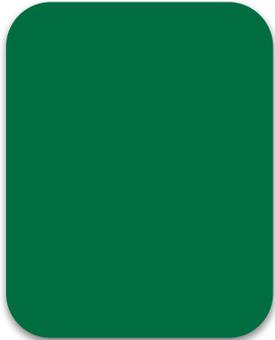
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# Welcome!

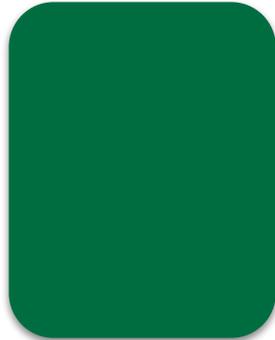
CPM Virtual Learning Series



## Session Facilitators

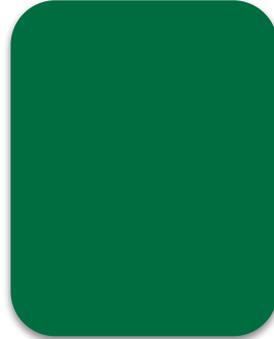


*Name*



*Name*

## Support



**Regional  
Professional  
Learning  
Coordinator**

# Tech Tip



## Viewing Options



Make fullscreen

Settings

About

Help

Keyboard shortcuts

End meeting

Leave meeting



Welcome!

CPM Virtual Learning Series

Foundations for Implementation - Session 1

*What should I do before we get started?*

- + Feel free to test your mic, then mute.
- + In the Public Chat, share your location, school name, and the CPM course(s) that you teach.
- + Review our Virtual Routines.

### Virtual Routines

- Join with microphone.
- Private chat facilitator for individual support.
- Share your ideas.
- Be supportive to others.

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# Tech Tip



## Audio



**Join with microphone**

## Troubleshooting



**Use options below presentation to troubleshoot audio issues.**

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# Opening

## Outcomes



### Participants will:

- + Reflect on the efficacy of their current summative assessment practice.
- + Examine the chapter progression.
- + Examine and reflect on equitable assessment practices.

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# Opening Agenda



## Assessment for Learning Over Time



- + Opening
- + Learning Trajectory
- + Building Equity into your Assessment Culture
- + Closure

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# Opening



Be willing to take **risks**.

Have a **visionary** mindset.

Stay **engaged**.

Explore and reflect on your **beliefs**.

Give **grace** to others and yourself.

**Change takes time, effort, and support!**

# Opening Icebreaker



## Opening Icebreaker

Team 1



Resource Manager:  
First name - first alphabetically



Task Manager:  
First name - second alphabetically



Recorder Reporter:  
First name - third alphabetically



Facilitator:  
First name - fourth alphabetically



## Assessment Beliefs

**Highlight the productive belief.**

The primary purpose of assessment is to inform and improve the teaching and learning of mathematics.

The primary purpose of assessment is accountability for students through report card marks or grades.

[Click here](#) to see a full list of the Productive & Unproductive Assessment Beliefs.

# Opening

## Beliefs about Mathematics Assessment



PRODUCTIVE BELIEF		
N C T M	1	The primary purpose of assessment is to inform and improve the teaching and learning of mathematics.
	2	Assessment is an ongoing process that is embedded in instruction to support student learning and make adjustments to instruction.
	3	Mathematical understanding and processes can be measured through the use of a variety of assessment strategies and tasks.
	4	Multiple data sources are needed to provide an accurate picture of teacher and student performance.
	5	Assessment is a process that should help students become better judges of their own work, assist them in recognizing high-quality work when they produce it, and support them in using evidence to advance their own learning.
	6	Ongoing review and distributed practice within effective instruction are productive test preparation strategies.

C P M	7	Authentic assessment means assessing in a manner that mirrors the way the students have learned, and focusing on what the students know, rather than what the students do not know.
	8	Assessment, as with the learning, should focus on the big ideas and the connections to assess for understanding, and not on the fine grain-sized skills.
	9	Assessment and teaching should be seamlessly interwoven, and time should be spent on both. Because of the lack of time most teachers have, it is important to assess wisely, and use the supports that are in place.
	10	Assessment is the process of understanding student learning, and grading is evaluating that understanding. The bulk of the teacher's time should be spent on assessing rather than grading.

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# Opening

## Effective Math Teaching Practices



Establish goals to focus learning.

Implement tasks that promote reasoning and problem solving.

Pose purposeful questions.

Support productive struggle in learning mathematics.

Elicit and use evidence of student thinking.

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# Opening

Assessment ≠ Grading





Developing an assessment system  
to complement CPM's Principle of  
Mixed, Spaced Practice.

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# Learning Trajectory

## eBook Access



Enter Enrollment PIN

Enroll

Cancel

### Steps to enroll in eBook:

1. Go to [enroll.cpm.org](https://enroll.cpm.org)
2. Enter Enrollment Pin: **In the Public Chat**
3. After your pin has been verified the welcome screen will appear.
4. Go to [ebooks.cpm.org](https://ebooks.cpm.org) and verify you have access to the ebooks.

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# Learning Trajectory

## The Challenge



Developing an assessment system to complement CPM's Principle of **Mixed, Spaced Practice**.

Creating appropriate assessments that model the **mastery over time** component of CPM.

*What topics can we expect most students to master by the end of this chapter?*

*What topics are in development and not yet ready to be assessed at a mastery level?*



## Using CPM materials, we will:

Identify formative or summative learning targets.

Learn a process for tracking learning targets throughout a chapter/course.

Identify multiple forms and levels of assessment to encourage mastery over time.

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# Learning Trajectory

## Three Assumptions



Assessments must align with what students are practicing.

CPM materials will be the resource.

- + Review & Preview
- + Chapter Closure problems

The goal is to identify formative/summative learning targets.

- + summative: material from prior chapters
- + formative: material from current chapter

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# Learning Trajectory

CC3 - Chapter 4



In this chapter, you will learn:

- + How to change any representation of data (such as a pattern, table, graph or rule) to any of the other representations.
- + How to use the connections between patterns, tables, graphs, and rules to solve problems.
- + Mastery of Checkpoint 4: Area and perimeter of circles and composite figures.

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# Learning Trajectory

## Gallery Walk



- + What do you notice?
- + What is appropriate to assess summatively?
- + What is appropriate to assess formatively?
- + What concepts are in more than one chapter?

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# Learning Trajectory

## Partner Chat



How can the Learning Trajectory support CPM's philosophy of mastery over time?



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# Building Equity Into Your Assessment Culture

Developing Assessment Capable Learners



## Learning Log: Connect-Extend-Challenge

How are the ideas and information presented **connected** with what you already knew?

What new ideas did you get that **extended** or broadened your thinking in new directions?

What **challenges** or puzzles have come up in your mind from the ideas and information presented?

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# Building Equity Into Your Assessment Culture

## Developing Assessment Capable Learners



## Assessment Capable Learners:

- + Are aware of their current level of understanding in a learning area.
- + Understand their learning path and are confident enough to take on the challenge.
- + Can select tools and resources to guide their learning.
- + Seek feedback and recognize that errors are opportunities to learn.
- + Monitor their own progress and adjust course as needed.
- + Recognize what they're learning and can teach others.

# Building Equity Into Your Assessment Culture

## CPM and Assessment Capable Learners



CC Algebra

### 1. TEAM BRAINSTORM

Lesson (ENG)

Lección (ESP)

Ar What have you studied in this chapter? What ideas were important in what you learned? With your team, brainstorm a list. Be as

This problem is the checkpoint for rewriting equations with more than one variable. It will be referred to as Checkpoint 6A.

[Homework Help](#)

# What CPM structures are embedded within the curriculum that support the development of assessment capable learners?

Solve each equation for the indicated variable.

a.  $-3x + 5y = -16$  (for  $y$ )      b.  $y = mx + b$  (for  $x$ )      c.  $A = \pi r^2$  (for  $r^2$ )

Check your answers by referring to the Checkpoint 6A materials located at the back of your book.

Ideally, at this point you are comfortable working with these types of problems and can solve them correctly. If you feel that you need more confidence when solving these types of problems, then review the Checkpoint 6A materials and try the practice problems provided.

From this point on, you will be expected to do problems like these correctly and with confidence.

[Checkpoint 6A: Rewriting Equations with More Than One Variable](#)

a.  $y = 2(0.8)^x$

b.  $y = 3.5(3)^x$

• [Lesson 7.1.1](#) – Graphs with Asymptotes

• [Lesson 7.1.3](#) – Compound Interest

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# Building Equity Into Your Assessment Culture

Closure



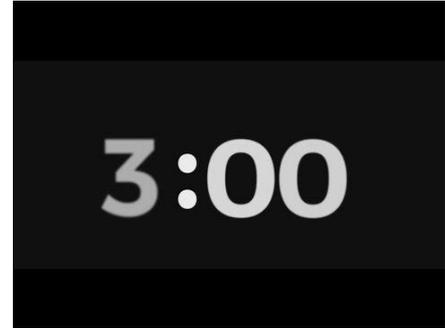
## Private Chat

Share:

- + your chosen reminder.
- + why you selected that reminder.

Make connections to:

- + the Productive and Unproductive Assessment Beliefs.



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# Closure

## Outcomes



## Participants will:

- + Reflect on the efficacy of their current summative assessment practice.
  - + Identifying Productive and Unproductive Assessment Beliefs
- + Examine the chapter progression.
  - + Learning Trajectory
- + Examine and reflect on equitable assessment practices.
  - + Building Equity into your Assessment Culture, Developing Assessment Capable Learners

# Closure

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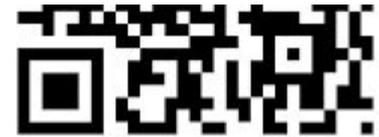
# Closure



- + Parking Lot
- + Attendance
  - **In the Portal**
- + **Homework:** On-Demand Module
  - Activity 1: Prior to Session 1
  - Activity 2: Prior to Session 3
- + Continuing Education Credit



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#MoreMathforMorePeople