

# Common Core Math Standards

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# Background

- 35 years teaching college students.
- 25 years working with K-12 teachers and their students.
- 15 years working with math textbooks from Singapore. Their students are top math performers in international studies.



# Common Core - Math

It's about time!

Much of what I read in the media and online appears to be written by people who have not read it.

[www.corestandards.org](http://www.corestandards.org)



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# What is CC?

- CC is not a curriculum.
- CC is not a pedagogy.
- CC is not a test for assessing students OR teachers
- CC does not tell teachers how to teach or run their classrooms.
- CC is not a federal mandate.



# What is CC?

Standards state what math students should learn at each grade level.

It is an initiative of the states.



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# What is CC?

- CC set a **higher bar**. It stresses both understanding and fluency
- There's nothing “new” about the mathematics. It just has to **make sense** now.



# Why was CC developed?

## Two Reasons

### A. Student Performance in International Studies.

Our students are not prepared to compete in a global economy.

- Too many college students need remediation in math.
- Many college credit-bearing courses address high school math topics.



## B. Inconsistency in expectations among states.

Example – When do different state documents call for the introduction of addition and subtraction of fractions?

Grade	Addition & Subtraction of Fractions
1 <sup>st</sup> grade	2 states
2 <sup>nd</sup> grade	
3 <sup>rd</sup> grade	7 states
4 <sup>th</sup> grade	22 states
5 <sup>th</sup> grade	9 states
6 <sup>th</sup> grade	1 state
7 <sup>th</sup> grade	1 state
8 <sup>th</sup> grade	

We need a  
“common  
core.”

Source: 2006 report - page 8 of

<https://mospace.library.umsystem.edu/xmlui/bitstream/handle/10355/2578/intendedMatematicsCurriculumRepresentedAtateLevelStandards.pdf?sequence=1>



# Who cares what other states do?

We're the best.

- Guess what – They all say that.
- Our old MA standards may have been the best in the U.S. But not in the world.
- They lacked the focus, coherence and rigor that we see in the top performing countries.
- If ours were so strong, why do so many of our students require remedial work in college?

# Challenges

# Challenges

1. Test Scores will go down.

- That often happens when you raise the bar.
- We need to be careful about how test scores are used.



# Challenges

2. Parents think the math is different.

It is in one big way: We expect it to make sense and be understood.

Communication with parents is critical. They want to help their children.



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# Challenges

## 3. Teacher preparation.

- Most K-8 teachers lack the depth of understanding necessary to raise the bar as CC demands.
- MA is ahead of the country. Since 2007, we've had the most rigorous standards in the country for new elementary teachers. But what about the teachers who entered the work force before then.
- **Teachers need our support.**



# Challenges

## 4. Politics and outright lies.

If a claim is made regarding CC, don't take it on face value. **Read the standards** – [www.corestandards.org](http://www.corestandards.org)

**"A lie told often enough becomes the truth"**

