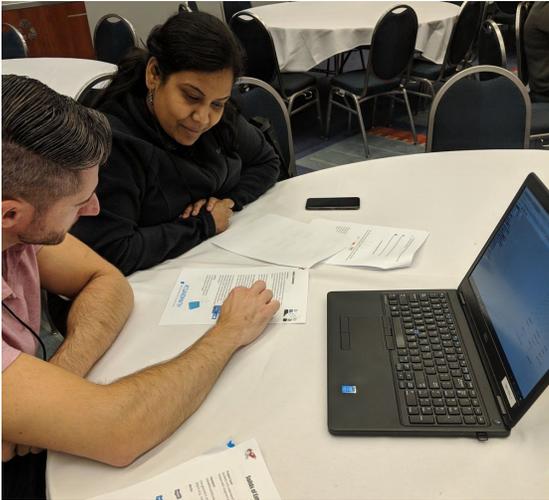


# Professional Development and Consulting

Partner with CSandMath, a consulting group looking to train math teachers how to code and incorporate it into their core math classes. We are not looking to replace traditional math, rather infuse career-ready applications of math and exposure to the principles of computer science.



**We provide high quality professional development, mentoring, and resources that teachers can immediately implement into their math classrooms.**

Whether your district, school, or organization is new to offering STEAM and computing opportunities for students or has experience, CSandMath's professional development opportunities can be customized to meet your needs.

Participants can expect one or two day beginner workshops on how to code, practical ideas of how to intentionally integrate programming into the K-12 math classroom to enhance student understanding, incorporating equitable teaching practices that engage math learners, and *MANY FREE LESSONS* to start!

## Benefits and Features

### Benefits: How will this help teachers?

- Students will become savvy problem solvers, with a career-ready advantage in computing
- This is an innovative and interdisciplinary experience that will strengthen their technological applications for true STEAM learning and ignite student interest in computer science (CS)
- They'll incorporate low-floor, high-ceiling tasks as a strategy to differentiate learning
- Teach students to shift from consumption of information to active creators of artifacts

### Features: What will they learn?

- The fundamentals of programming in Scratch, a block-based language from MIT
- Experience in Beagleblocks, a 3D environment in which you can 3D print your designs
- How to bridge into text-based coding in Python using variables, iteration, and functions
- How to partner knowledge of fundamental math standards with powerful principles of CS

We're flexible on age groups from grades 4-12, and can tailor sessions to meet the goals and needs of your students and staff

Want to learn more? Visit our [website](#) or email us at

[mikeandashley@csandmath.org](mailto:mikeandashley@csandmath.org)

## Sample Lessons Aligned to National Math Standards



Price 40

\$5 Off 35

20% Off 32



### Calculating Percentages

$$2x^2 + 3x - 2 = 0$$

The roots are 0.5 and -2



$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

discriminant 25

Zero 1 0.5

Zero 2 -2

### Solving Quadratic Equations

## Experienced Presenters

We have experience leading workshops at many national conferences including:

- National Teachers of Mathematics (San Antonio, TX, Washington DC and San Diego, CA)
- Minnesota Teachers of Mathematics (Duluth, MN)
- California Math Council (Palm Springs, CA)
- TIES Conference (Minneapolis, MN)
- Code Savvy (University of Minnesota)
- Computer using Educators (CUE) Conference (Los Angeles, CA)



## Meet your Trainers

Mike Larson is a High School Math Teacher in Minnesota. He was a 2016 TIES Exceptional Teacher and earned the Presidential Award for Excellence in Math & Science Teaching (PAEMST) for Minnesota in 2017.



Ashley Goetz is a Middle School Math Teacher in Minnesota. She is the math department lead at her school, has experience teaching with Girls Who Code, and is a Desmos Fellow.

