



PATHWAY 2 CAREERS



- Monitor growth in Algebra I and Geometry skills.
- Align student measures with career accessibility.
- Use Quantile measures for each student to assess readiness for math instruction.
- Inform students of careers they are prepared to access using the Quantile Career Database.



MetaMetrics®

# Pathway2Careers Math Assessments

## *Algebra I and Geometry*

Powered by the Quantile® Framework for Mathematics

The Pathway2Careers (P2C) math assessments for Algebra I and Geometry provide students with a Quantile measure that represents students' mathematical achievement level and indicates the skills and concepts they are ready to learn. This information allows educators to more easily align instruction and educational materials with a student's current skill level. The P2C assessments also provide the ability to track students' mathematics growth with multiple assessments throughout the year – beginning, middle, and end. A student's increasing Quantile measure is an indication of his or her readiness to learn progressively more complex mathematical concepts. The rate of growth that students demonstrate can also indicate their likelihood for accessing more advanced math skills.



In addition to monitoring growth, student Quantile measures provided by the P2C assessments can be compared to the math demands of different careers in the Quantile Career Database. This database, created by MetaMetrics® (developer of the Quantile Framework for Mathematics), lists hundreds of careers and their Quantile measures representing the math demand for entry into the career. By Comparing their Quantile measure from the P2C math assessments to the math demand of careers they aspire to, students are motivated to be mathematically ready for these careers with continued study. The purpose of the database is to provide a critical point of connection for students, allowing them to see how their learning applies to their current and future employment potential. With this awareness, students can better prepare for the realities of today, as well gain inspiration to acquire skills for the future.



**PATHWAY 2 ALGEBRA**  
Education with Destination

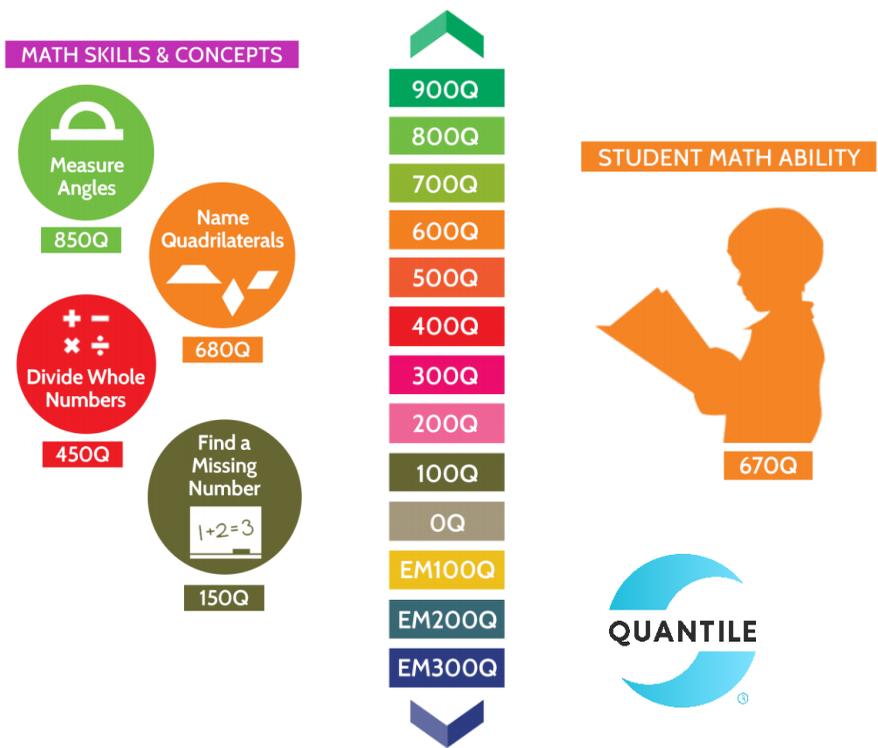


**PATHWAY 2 GEOMETRY**  
Education with Destination

Visit [curriculum.pathway2careers.com](http://curriculum.pathway2careers.com) to learn more about the P2A and P2G career-focused curriculum.



- Identify the mathematical skills that a student is ready to learn.
- Target instruction with level-appropriate tasks and materials.
- Monitor math growth over time.
- Analyze math ability in relationship to career readiness.



## Understanding Quantile Measures

- The Quantile scale ranges from Emerging Mathematician (below 0Q) to above 1600Q. Each numeric value within the scale, referred to as a Quantile measure, is representative of a student's overall mathematical ability.
- A student's Quantile measure indicates the progress made in learning math content and what new math content the student may be ready to learn.
- Increases in a student's Quantile measure points to his or her readiness to learn progressively more complex mathematical concepts.

## Quantile Measures and Career Preparedness

Sample Database Search for *Computer Systems Analysts*

### Career Information

Bright Outlook <sup>?</sup>	Years of Education <sup>?</sup>	SOC Code <sup>?</sup>	Field(s)
No	16	<a href="#">15-1121.00</a>	Information Technology

### Quantile Information <sup>?</sup>

Lower Quantile Measure	Typical Quantile Measure	Higher Quantile Measure	Highest Math Course Required
970Q	1120Q	1300Q	Calculus

- The Quantile Career Database relies on extensive research to examine the mathematical demands of hundreds of Quantile-measured careers.
- Each student's Quantile measure can be compared to careers within the database to understand careers they are prepared to access and the math demands of careers they aspire to achieve.

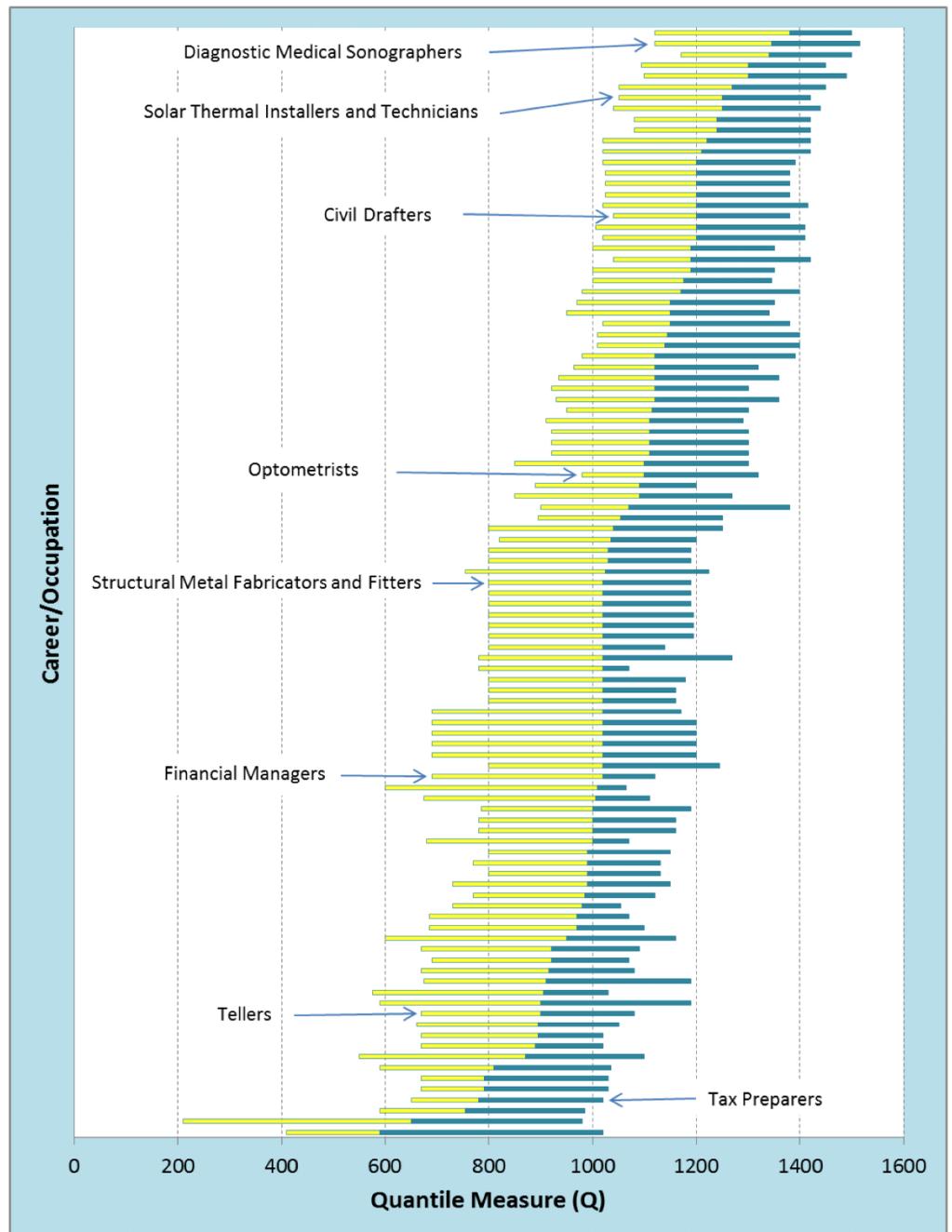


## PATHWAY 2 CAREERS

- Understand the range of math skills needed to complete certificate or degree programs for specific careers.
- Generate student awareness of how their current math abilities relate to the demands of career training and preparation for desired occupations.
- Prepare students with math skills needed to access high-wage, high-demand occupations.



MetaMetrics®



- For each occupation in the Quantile Career Database, Quantile measures were assigned to the skills necessary for entry into the career. These skills were determined by examining the math demand of career preparation materials, such as training manuals, textbooks, and certification exams.
- The career range shows where the middle 50% of the assigned Quantile measures fall for that career. This range represents the span of Quantile measures for the mathematical demands of tasks and responsibilities related to common career training materials and early first-year job requirements.
- With this information, students can gain awareness of the range of mathematics skills and concepts they will need in order to successfully complete certificate or degree programs and meet initial employment requirements for specific careers.

Learn more at [curriculum.pathway2careers.com](https://curriculum.pathway2careers.com)