Math Level 14 Placement

There are three different pathways to the math course required for your academic goal. Two of these pathways, Quantitative Reasoning and STEM, are intended for students planning to transfer to a four-year institution and the third is for those in Career and Technical Education (CTE) programs.

The Quantitative Reasoning path is for students whose academic goal is a Bachelor's degree in fields such as Music, Psychology, Art, History, Nursing and others. If you are on this path, Math Level 14 places you into MTH 105.

The STEM path is for students whose academic goal is a Bachelor's degree in fields such as Engineering, Computer Science, Business, Biology, and others. If you are on this path, Math Level 14 places you into MTH 095. See Math Level 10 Placement information for appropriate math skills needed to succeed in MTH 095.

The CTE path is for students who plan to complete their degree or certificate at COCC in a program such as Automotive, GIS, Medical Assisting, Welding, and others. More information on CTE programs is found here. If you are on this path, Math Level 14 placement means you are eligible to take a variety of courses and your choice depends on the specific CTE program.

Your advisor will help you determine the correct path and course for your academic goal. More information on the complete paths is available here: Math Course Flow 2020-21

If you are on the Quantitative Reasoning path, success in MTH 105 is more likely if you have strong skills in the following topics **before** taking the course.

- Use fractions, percents, ratios and decimals in an applied setting.
  1) A full box of candy has 360 pieces. Shellie has $\frac{2}{3}$ of a box, Steve has 50% of a box, and Katherine has 0.6 of a box. Who has the most candy? Determine the number of pieces for each person.

- Develop rationale for and utilize unit arithmetic, including dimensional analysis, in context.
  1) A moderately fast runner can run about 12 feet per second. Find her speed in miles per hour. Round appropriately.

- Use order of operations, including with signed numbers.
  1) Simplify $\left(\frac{1}{9}\right)(-2)-\left(\frac{2}{9}\right)(-3)+\left(\frac{5}{9}\right)(5)$ (*answer as a fraction and a decimal)*

- Recognize the need for and apply formulas and mathematical models when appropriate.
  1) Find a formula for the cost C of owning a car for *y* years if the purchase price was $6000, gas costs $50 per month, insurance is $600 per year, and maintenance is $150 per year. (Ignore any other costs.)

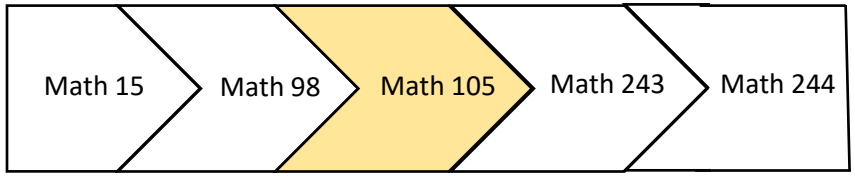
Questions about your math placement? Email mathplacement@cocc.edu

Math Course Pathways

Below are some questions to consider before you meet with a COCC advisor. Remember, you do not need to make the decision about which pathway you are on by yourself – you will have advising help in the future to guide your choice.

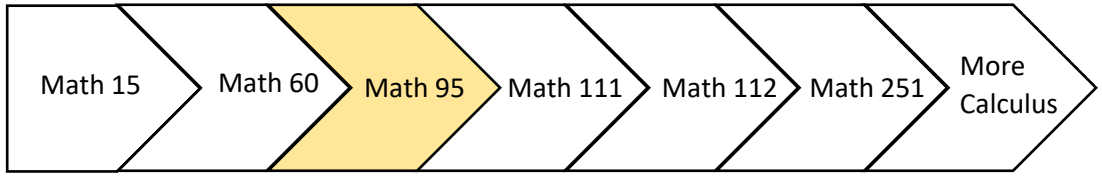
Are you considering a field such as music, psychology, art, nursing or history?

Follow the Quantitative Reasoning Pathway:



Are you considering business or a science field such as engineering, computer science or biology?

Follow the STEM Pathway:



Are you considering a Career-Technical field such as Automotive, GIS, or Welding?

Career-Technical Education (CTE) Pathway