

What is MATH 115?

This course intertwines mathematics and the health sciences field. Students will learn the necessary skills to succeed in the health sciences workplace. Topics begin with a review of basic arithmetic and foundational math skills, then progress through simplifying and solving algebraic expressions and equations, respectively. This course covers statistical measures of central tendency: mean, median, mode and range. Problems related to the health care field include oral, parenteral, and intravenous dosage calculations and dosage calculations based on weight. Additionally, students will learn percent strength solutions, how to read medication labels, syringes, IV bags, and graphs, and use ratios and proportions to convert units in drug calculations.

I need MATH 115. Am I ready?

It is always recommended to consult with an academic advisor or student success coach before registering for classes. The following brief assessment can be used as an additional tool to aid your decision making process whether you are ready for Math 115 or not.

- If you feel confident that you could correctly address 4 or more of these exercises, then enroll in any modality of MATH 115.
- If you feel less confident or think that you could only address 3 or less of these questions correctly, then you may need some supplemental help when you enroll in MATH 115. Consider registering for face-to-face, or synchronous sections of this course.

1. Can you complete these operations with fractions?

$$34\frac{1}{4} + 10\frac{4}{5} =$$

$$34\frac{1}{4} - 10\frac{4}{5} =$$

$$34\frac{1}{4} \times 10\frac{4}{5} =$$

$$34\frac{1}{4} \div 10\frac{4}{5} =$$

2. (CLO #1): Can you convert between fractions, ratios, decimals and percentages?

Fraction	Ratio	Decimal	Percentage
?	?	?	$15\frac{1}{4}\%$
?	7:16	?	?

3. Can you read this syringe?



4. Can you answer the following percent strength solution questions: A 0.09% strength solution has been prepared:

- How many grams of medication are in the 0.09% strength solution?
- How many milliliters of solution are in the 0.09% strength solution?
- Express this solution as a simplified ratio.
- If you have 50 mL of solution, how many grams of pure drug will you need in order to keep the 0.09% solution?

5. Can you translate this into an equation and solve it?

Donna has seven more patients to care for than Robert. If Donna has 18 patients to care for, how many does Robert have?

6. Can you calculate the mean, median, mode, and range of this data: 100, 98, 99, 97, 98, 100?