

What is MATH 101?

This course is designed to prepare students for the concepts and rigor of college-level STEM, S (science), T (technology), E (engineering), M (mathematics) courses. Topics include writing, and evaluating algebraic expressions; solving linear equations and inequalities; manipulation with positive and negative exponents; addition, subtraction, multiplication, division and factoring of polynomials; graphing and writing linear equations; graphing and writing inequalities, simplifying and solving rational expressions and equations, and applying functional properties.

What's the difference between MATH 101 and 101S?

MATH 101 (without the "S") is the main college level class. The "S" denotes supplement. Any section with the "S" is a supplemental class. Student can enroll in only MATH 101. Students cannot enroll in only MATH 101S. All supplement sections must be taken concurrently with the main college level course.

There are only two options: either MATH 101 **OR** MATH 101+MATH 101S.

What is a supplemental class?

A supplemental math course is designed to provide support to students who are apprehensive about, unsure of, or uncomfortable with their math skills. Supplemental course sections offer 2 additional hours per week of course specific practice. If you like the idea of extra practice, guidance and feedback on course materials; or want to create more time & space for math practice, consider enrolling.

I need MATH 101. Should I also enroll in MATH 101s?

So, you've learned that you need or want to take MATH 101. This is a brief assessment to help you decide if you should also take the supplement class, MATH 101S, concurrently with your MATH 101 class. It's also a good idea to talk with an advisor before making your decision.

- If you feel confident you could correctly answer 4, 5 or all 6 of these questions, then enroll in only MATH 101.
- If you feel less confident or think you could only answer 0, 1, 2, or 3 questions correctly, then enroll in MATH 101 and MATH 101S.
- If you are uncomfortable with all of these, and do not need 101 as a pre-requisite for another math course, consider MATH 116 as an alternative.

1. Can you use the order of operations to evaluate each expression?

a. $3(5 - 1)^2 + 12$

b. $9 \cdot 5 - 3 \cdot 2$

c. $\frac{67-7}{8 \cdot 3 - 2 \cdot 2}$

2. Can you perform each of the following operations without using a calculator?

a. $3\frac{1}{2} + 2\frac{1}{5} =$

b. $3\frac{1}{2} - 2\frac{1}{5} =$

c. $3\frac{1}{2} \cdot 2\frac{1}{5} =$

d. $3\frac{1}{2} \div 2\frac{1}{5} =$

3. Can you solve each of these equations for x ?

a. $3.8x + 1 = 5.4x - 2.2$

b. $4(2x - 9) - 6 = 3x - 2$

4. Can you graph $y = 2x - 4$ on the coordinate plane?

5. Can you find the unknown?

a. Using the formula $V = \pi r^2 h$, find the volume of a cylinder with a radius of 124 meters and height of 232 meters.

b. Using the formula $P = 2L + 2W$, solve the equation for L .

6. Can you simplify each of the following expressions?

a. $\frac{(-15s^6t^6)(5t^3)}{-5st^7}$

b. $\frac{\frac{x}{3} - \frac{1}{4}}{\frac{16}{4x} + \frac{1}{16}}$

7. Katrina inherited some money and invested it at 6% simple interest. At the end of the year, the total amount of her original principal and the interest was \$12,720. How much did she originally invest?