

Skill/Concept Review Questionnaire

Please review the skills and concepts listed below and indicate your level of **Confidence** with approaching these types of problems. DO NOT TRY TO LOOK UP HOW TO DO THESE PROBLEMS.

- ✓ **Confident** (I can perform this skill on demand without review)
- ✓ **Mostly Confident** (I will be able to perform this skill after briefly reviewing this topic on my own)
- ✓ **Not Confident** (I need instruction on this topic before I can perform this skill)

In order to be successful in the corresponding course you should be **confident** or **mostly confident** in your ability to solve these example problems. Instructors will not be teaching these types of problems and will expect students to already have a background in solving these problems.

NON-STEM TRACK: QUANTITATIVE REASONING/ STATISTICS TRACK MATH 120C AND 106C

Confident	Mostly Confident	Not Confident	
			Simplify without a calculator: 0.25×8
			Simplify without a calculator: $32.1 - 19.67$
			Simplify without a calculator: $\frac{1}{3} - \frac{1}{6} + \frac{5}{12}$
			Simplify without a calculator: $\left(\frac{2}{3}\right) \div \left(\frac{3}{8}\right)$
			Simplify without a calculator: $-12 - (-7)$
			Round to the nearest hundredth: 65.43679
			Write in Decimal Notation: 3.47×10^{-4}
			Evaluate: $50 \div (-5)^2 + 2(7 - 16)$
			Solve the following equation: $2x + 10 = 50$
			Find the area of a triangle with a base of 3 feet and a height of 4 feet.

Not confident: Placement in Quantitative Reasoning with Co-rec

Mostly confident: Placement into Quantitative Reasoning

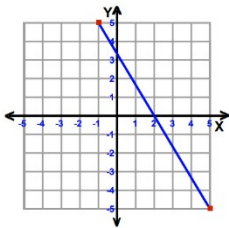
Confident: Move on to next page

If a STEM major is not confident on this page, please refer to Department Chair for more course specific advising and placement

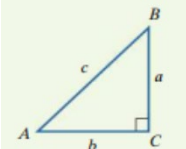
STEM TRACK: COLLEGE ALGEBRA THROUGH CALCULUS

Confident	Mostly Confident	Not Confident	
			The perimeter of a square is 60 inches. Find the length of each side.
			The perimeter of a rectangle is 44 ft. The length is 2 feet less than 3 times the width. Find the length.
			Simplify: $-6\left(\frac{1}{2}x - 1\right) - (5 - 3x)$
			Given the expression: $x^2 - y$, find the value if $x = -2$ and $y = 6$
			23 is what percent of 50?
			22 out of 30 students passed the test. Find the proportion of students who failed.
			Find the slope of the line passing through the points $(-1, 3)$ and $(2, 6)$
			Solve for x: $3(x - 5) = 150$
			Solve for n: $\frac{n}{25} = \frac{3}{10}$
			Water runs from a pump at a rate of 1.5 gallons per minute. At this rate how long would it take to fill a tub with 150-gallon capacity.?

Not Confident: Placement in Intermediate Algebra **Mostly Confident:** Placement in College Algebra with Co-Rec or Intermediate Algebra **Confident:** Move on to next table

Confident	Mostly Confident	Not Confident	
			Simplify: $(2bc^2d^3)^2(3b^3c)$
			Simplify: $\sqrt{81} - \sqrt{25}$
			Simplify: $\sqrt{12}$
			Find the equation  of the line in slope-intercept form:
			Find the equation of the line passing through the two points $(-1, 3)$ and $(2, 6)$. Express in Standard form.
			Simplify: $(4x^3 - 2x^2 + 1) - (2x^3 + x - 3)$
			Simplify: $(3x + 5)(4x - 7)$
			Simplify: $(2x + 3)^2$
			Factor: $x^2 + x - 12$
			Given: $f(x) = 2x^2 - 3x + 1$, find $f(-2)$

Not or Mostly Confident: placement in College Algebra with Co-rec **Confident:** Placement in College Algebra

Confident	Mostly Confident	Not Confident	
			Simplify: $(\sqrt{8} - 3\sqrt{12})(1 + \sqrt{2})$
			Simplify: $\frac{3+4i}{3-2i}$
			Solve using the quadratic formula: $x^2 = 8x - 1$
			Solve by completing the square: $x^2 - 8x + 1 = 0$
			Use division to find the zeros: $f(x) = x^3 + 10x - 12$
			Given: $f(x) = 6x^2 - 2x + 1$ $g(x) = 2x - 3$ Find: $f(g(x))$
			Find the solution to the given equation? $\sqrt{5x+1} + 9 = 3$
			Solve: $(n - 3)^{5/4} = 32$
			Solve: $\frac{5}{x+2} = \frac{x}{2x-3}$, state any restrictions.
			Find the missing sides and angles of the given: $a = 8$ and $B = 35^\circ$ 

Not or Mostly Confident: Placement in College Algebra

Confident: Placement in Pre-Calculus or Higher. Placement for General Chemistry I or Physics I (Algebra based)

Math Experience/Attitude Questionnaire

1. What is your reaction to being told you must take a math course?
_____ I am excited to be taking a math course.
_____ I am neutral about taking a math course.
_____ I am nervous about taking a math course.
2. How comfortable are you with learning new math concepts and solving problems
_____ I feel comfortable with mathematics.
_____ I feel somewhat comfortable with mathematics.
_____ I am not comfortable with mathematics.
3. What was the last math class you took? How many years ago was this class?
4. What is the highest level of math you took?
5. What has been your experience in a math class?
6. When taking a math class, do you use supports such as tutoring or workshop to help you?