Math Placement at Zane State College

Thinking beyond your placement test score to choose the best math course for you:

 Ask yourself these questions:

Has it been one or more years or more since you completed your last math course? Do you have a good understanding of the concepts covered in your last math course? On the placement test, did you guess to answer some of the questions or did you know the correct answers?

Consider your answers to the above questions and whether your progress in the required math courses will be more successful if you take a course to review the prerequisite concepts before taking the higher level course.

Information to guide your decision:

MTH 091 Pre-Algebra

Do you have mastery of the following skills? If not, take MTH 090 to become proficient in these skills before taking MTH 091.

- **Mastery of the whole number facts of addition, subtraction, multiplication, and division.**
- **Use order of operations to simplify numerical expressions.**
- **Add, subtract, multiply, and divide fractions and mixed numbers.**
- **Identify the place value of decimals and add, subtract, multiply, and divide decimals.**
- **Use ratio, rates and proportions to solve problems.**
- **Identify the parts of a percent problem and use the basic percent equation to find the unknown part of an applied percent problem.**

MTH 097 Beginning Algebra

Do you have mastery of the following skills? If not, take MTH 091 to become proficient in these skills before taking MTH 097.

- Add, subtract, multiply, and divide positive and negative numbers.
- Use order of operations and remove grouping symbols to simplify algebraic expressions.
- Identify variables, coefficients, like terms, absolute values, opposites, bases, and exponents.
- Solve equations with variables on both sides of the equation and with parentheses.
- Translate word problems into algebra equations and solve.
- Use the commutative, associative, and distributive properties to simplify algebraic expressions and combine like terms.
- Use basic geometry formulas of area and perimeter to solve problems.
- Evaluate an algebraic expression or formula by substituting values.

MTH 113 Algebra

Do you have mastery of the following skills? If not, take MTH 097 to become proficient in these skills before taking MTH 113.

- Identify different types of numbers (integer, rational, irrational, etc).
- Apply the product, quotient, and power rules of exponents and change a negative exponent to positive exponent.
- Write a number in scientific notation and vice versa.
- Add, subtract, multiply, and divide polynomials.
- Factor polynomials using trial and error method, grouping method, and AC method.
- Know how to factor the special cases: difference of two squares and perfect square trinomial.
- Determine whether a polynomial is prime.
- Use equations to solve word problems involving percents, simple interest, coin problems, geometry of angles, area, and perimeter.
- Graph points and lines in the rectangular coordinate system.