

Algebra and Geometry Readiness Indicators for Incoming Students

Students enter District 214 with differing experiences in math. To better help our middle school partners determine proper placement for their students, the following categories of mathematics can be used to assist in prioritizing the foundations necessary for success in a child's first high school math course.

Middle school instructors will be provided with a detailed list of statements that provide added detail for instruction.

Number and Operations

All students are able to do the following:

- Understand types of numbers (integers, fractions, decimals), their properties and the correct order of operations.
- Perform computations correctly, **with and without a calculator**.

Algebra and Functions

All students are able to do the following:

- Solve problems using algebraic expressions and symbols to represent relationships, patterns and functions of different types.

Data, Statistics, and Probability

All students are able to do the following:

- Analyze data, understand descriptive statistics, make inferences, and determine the likelihood that certain events will occur.

Geometry and Measurement

All students are able to do the following:

- Solve problems based on understanding the properties of shapes, such as triangles and circles, and the spatial relationships between angles and lines.

Representations

All students are able to do the following:

- Communicate ideas and solve problems using verbal, numerical, symbolic and graphical representations.

Problem Solving

All students are able to do the following:

- Solve abstract and practical problems using a variety of strategies.
- Monitor their problem-solving progress and evaluate the validity of answers in context.

Reasoning

All students are able to do the following:

- Develop and use mathematical arguments and proofs to explore the truth of conjectures and justify conclusions.

Communications

All students are able to do the following:

- Express mathematical ideas precisely.
- Communicate ideas coherently and clearly in the language and notation of mathematics.



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English Readiness Skills for Incoming Freshmen

The following list is a guide to assist in prioritizing the foundations necessary for success in our introductory English course, Written and Oral Communication.

Reading (both fiction and nonfiction)

All students are able to do the following:

- Read closely in a moderately challenging text to identify explicitly stated information, ideas, or literary elements.
- Determine the best textual evidence for a simple conclusion.
- Identify the central idea of a passage with a single, clear purpose.
- Identify a simple relationship between information, ideas, or people (e.g., recognizing a basic comparison, contrast, or sequence).
- Determine the meaning of a relatively common word or phrase using clear context clues.
- Recognize a straightforward similarity or difference in a pair of moderately challenging passages.
- Annotate for a purpose (i.e., author's purpose, ask questions, vocabulary, etc.).

Speaking and Listening

All students are able to do the following:

- Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
- Engage effectively in a range of collaborative discussions.
- Use information to support their own views while acknowledging new information expressed by others.
- Integrate multiple sources of information and present in diverse media or formats.

Writing

All students are able to do the following:

- Summarize author's purpose for a reading.
- Use various types and styles of writing – i.e., persuasive, expository, comparison/contrast, and narrative.
- Make a clear central thesis/claim that guides the organization of the essay.
- Cite clear and specific textual evidence that supports the central claim.
- Write a well-structured essay that contains an introduction, body paragraphs, and conclusion.
- Employ appropriate transitions.
- Use conventions of standard written English.
- Proofread writing for errors.

Grammar

All students are able to do the following:

- Identify and understand the functions of the different Parts of Speech.
- Form conventional and complete sentences that avoid comma splices and fragments.
- Maintain subject-verb and pronoun-antecedent agreement.
- Communicate clearly in writing (basic sentence construction, punctuation, usage, and capitalization).
- Determine when particular contexts call for singular or plural possessive nouns and for plural or possessive nouns.



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