

Math 6 - Expectations for Exit Exam

This Test-Out Exam can be completed in 60 minutes and will be limited to 90 minutes. Students will be allowed to use a scientific calculator for appropriate sections of the exam, and it will be provided in the testing platform (students do not need to bring a calculator). The exam contains both multiple choice and constructed response items. Partial credit may be earned on some items. Any of the concepts listed below may be on the test. Students must score an 85% or above to pass the exam and be placed into Math 7 for the following school year (this score reflects a closer alignment to our AGP criteria).

Content Covered in the Course:

The Troy School District curriculum is based on the Michigan Mathematics Standards. The list below gives a brief description of the topics covered in the Math 6. For a detailed explanation of the content expectations, see the complete list of Michigan Mathematics Standards for Grade 6:

https://www.michigan.gov/-/media/Project/Websites/mde/Literacy/Content-Standards/Math_Standards.pdf?rev=1e793e2b1e314e4fa1abc754251b5dc9

The Exit Exam is a comprehensive assessment of the full Troy School District Curriculum and Michigan Mathematics Standards. Students should be prepared to demonstrate their proficiency on all content.

Area and Surface Area

Reasoning to find the area of composite figures

Parallelograms

Triangles

Polygons

Surface area of prisms and pyramids

Ratios:

Defining and writing ratios

Solving ratio and rate problems

Representing equivalent ratios

Unit rates in various contexts

Situations involving constant speed

Tape diagrams used to represent percentages

Situations involving measurement, rates, and cost

Reasoning about equivalent ratios and unit rates

Unit Rates and Percentages:

Units of measurement

Rates

Percentages

Dividing Fractions:

Meanings of fraction division

Algorithm for fraction division

Fractions in lengths, areas, and volumes

Arithmetic in Base Ten:

Addition and subtraction with decimals

Multiplying decimals

Dividing decimals

Expressions and Equations:

Equations in one variable

Solutions to equations

Stories represented by given equations

Equal and equivalent expressions

Expressions with exponents

Relationships between quantities using variables

Patterns of growth that can be represented using exponents

Relationships between independent and dependent variables

Rational Numbers:

Negative numbers and absolute values

Inequalities

Plot and interpret points on the coordinate plane

Common factors and common multiples

Data Sets and Distributions:

Data, variability, and statistical questions

Mean and MAD

Median and IQR

Students will also be expected to show proficiency in the Standards for Mathematical Practice (Common Core State Standards):

- Standard 1: Make sense of problems and persevere in solving them
- Standard 2: Reason abstractly and quantitatively
- Standard 3: Construct viable arguments and critique the reasoning of others
- Standard 4: Model with mathematics
- Standard 5: Use appropriate tools strategically
- Standard 6: Attend to precision
- Standard 7: Look for and make use of structure

- Standard 8: Look for and express regularity in repeated reasoning