

Math 3 Qualification Placement Test Information for Families

Process to pursue Math 3 as a ninth grader

- Students who wish to pursue Math 3 as a ninth grader must demonstrate the following:
 - Earn a qualifying score on the February diagnostic placement test for all incoming 8th graders.
 - Take an additional Math 3 qualification placement test in May and earn a qualifying score.

Math 3 Qualification Placement Test Overview

- The test will be a mix of free response and multiple choice questions.
- Students will be expected to show work on all questions.
- Questions that are correct will earn 1 point each
- Questions that are incorrect or left blank will earn 0 points
- Students may not use a graphing calculator during the assessment
- Students will have 90 minutes to complete the test
- IEP / 504 accommodations must be presented to the IA main office at least 48 hours prior to the day of the test.

Mathematical Content Included on the Math 3 Qualification Placement Test

On the Math 3 qualification placement test, students are given an opportunity to demonstrate competence (without a calculator) of topics such as (but not limited to):

- **All material covered by the February math diagnostic placement test**
- Quadratic functions – finding and analyzing key features, including intercepts and vertex
- Models of variation
- Binomial theorem
- Compound Probability
- Counting, including permutation, combinations, unions and intersections
- Implications and logically valid and invalid arguments
- Volume and surface area for rectangular prisms, cylinders and spheres
- Area of quadrilaterals, triangles and circles
- Vertical angles, co-interior angles, corresponding angles, alternate interior angles and alternate exterior angles
- Similar triangles
- Equilateral and isosceles triangles
- Exterior angles of a triangle
- Supplemental and complimentary angles
- Right triangle trigonometry
- Linear programming

Frequently Asked Questions about the Math 3 Qualification Placement Test

- What students should take the Math 3 qualification placement test?
All students who qualified for Math 2 on the math qualification placement test in February are welcome to assess. Students who pursue Math 3 as a ninth grader must earn a qualifying score on the Math 3 qualification placement test in May.
- Are there any common characteristics for students who take Math 3 as a ninth grader?
Math 3 is an honors math course typically taken by sophomores. Students who qualify to take this course as a freshman are in the International Academy's most accelerated math program, which includes beginning their study of calculus during their junior year. Once students have qualified, the students who should pursue this program are students who have the passion, dedication, independence, and time to develop a critical and rigorous understanding of the mathematics presented while moving at a rapid pace.
- Is there a certain class I must take in the eighth grade in order to qualify to take Math 3 as a ninth grader?
No, students qualify to take Math 3 as a ninth grader based on their performance on the Math 3 qualification placement test.
- What content is covered on the Math 3 qualification placement test?
Please see the previous page of this document for a list of content that could be included, in addition to the content that was included on the February qualification test for all students.
- Is the format of the Math 3 Qualification placement test the same as the Math Qualification test in February?
No. The Math 3 Qualification placement test contains a mix of free responses and multiple choice questions. Students will be expected to show work on each question. Questions will require students to demonstrate critical thinking and analysis skills, as well as content knowledge.
- Can I see the cover page of the Math 3 Qualification placement test ahead of time?
Yes, it is at the end of this document.
- Can I use a calculator on the Math 3 Qualification placement test?
No, the test is non-calculator.
- How will the Math 3 Qualification placement test be scored?
Questions that are correct will earn 1 point each. Questions that are incorrect or left blank will earn 0 points.
- What if I do not remember my student ID number?
All students will be given their identification numbers immediately prior to the start of the test.

IA Math 3 Placement Assessment

Student Name: SAMPLE

District: SAMPLE

ID # SAMPLE

Welcome!

We are so excited that you are here! The goal of this test is to help determine what math class at the International Academy is the best fit for you. Do your very best on the test, and do not worry if there are questions or topics you have not seen before or do not feel very comfortable with. Please do your best on whatever material you recognize.

Scoring

You earn one point for each correct answer. You will earn zero points for blank or incorrect answers.

There is no calculator allowed on the assessment. You will have 90 minutes to complete the assessment.

Sections

This test has two sections: Section 1 is multiple choice and Section 2 is free response. For both sections, please show work on each question on the assessment in the provided space. You may not receive credit for questions without appropriate working.

Section One

Please use the table on the first page of Section One to determine what your multiple choice answer for each problem is.

Each choice requires you to bubble in three letters. For example, if you choose ABE, you should bubble in A, B and E.

You will not use all answers. You will use some answers more than once.

Section Two

For this section, you will bubble in your answers for each question on the answer sheet. If you feel the answer you have found cannot be entered into the boxes, please bubble in all zeros. Please write all non-integer answers as reduced fractions. Do not bubble in zeros before your answer. For example, if your answer is $x = 5$, please bubble in your answer as just a "5" not "005". See the example below.

CORRECT METHOD:

19

		5
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

The correct method shows a grid for question 19 with the answer '5' in the top right box. The bubble for '5' in the third column is filled in.

INCORRECT METHOD:

19

0	0	5
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

The incorrect method shows a grid for question 19 with '005' in the top row. The bubbles for '0' in the first two columns and '5' in the third column are filled in. A diagonal line is drawn through the entire grid.