

## PLACEMENT TESTING INFORMATION BULLETIN

#### This information is for <u>Rutgers-Newark</u> students.

#### **PURPOSE OF THE TESTS**

Now that you have been admitted to Rutgers University-Newark, you will need to take placement tests. These tests are designed to provide information about your skills. Results will be used to help place you in the courses appropriate for your level of preparation. These tests are important to your success at Rutgers, so please take them seriously and do your best independent work. This will ensure that you begin studying at the right level to succeed in your classes.

#### **DESCRIPTION**

Test questions vary on each test. Once you begin a test, you must complete it in one sitting; you cannot stop time on that test. If you finish any section of a test early, you may go back to review your answers or you may submit your answers and move to the next section. Once time is up for a section, the answers you selected will be auto-submitted, and you should move to the next section.

<u>Math</u>: The Math test is <u>online</u> and is allotted 2 hours. It consists of three multiple-choice sections covering topics in computation (30 minutes), algebra (30 minutes), and precalculus (60 minutes).

<u>*Writing*</u>: The writing test is online via <u>Blackboard</u> and is allotted 90 minutes that will require a response to a prompt.

#### NOTE FOR TRANSFER/CONTINUING STUDENTS:

Transfer/continuing students should only test if advised to do so by a Rutgers adviser, or if indicated on their transfer summary/credit evaluation.

#### **ACCOMMODATIONS**

If you need testing accommodations (e.g. extra time, reader, scribe), please register with the Office of Disability Services and receive approval for accommodations **before** testing. Tests can only be taken once. Please visit <u>this link</u> to apply for services.

#### WHEN AND WHERE TO TEST

All tests will be administered online and can be completed from home/in a quiet environment with a reliable internet connection. Please use laptops or desktops – do not use mobile devices. A wired internet connection is preferred, but you may use a strong wireless connection as well. Please complete your placement tests on your assigned date within your allotted time of 72 hours.

All Math test sections must be completed in one sitting, writing test must be completed within given time frame. You may do both <u>required</u> tests consecutively or you may take a break for one evening. **Once you begin testing, you must complete all <u>required</u> assessments within the initial 72 hour testing period.** 

#### ACCESSING THE PLACEMENT TESTS

Follow these steps in order:

Confirm your Rutgers status and pay the fee at <u>this link</u>.
 After you are able to access the <u>Enrollment Pathway</u>, activate your NetID at <u>this link</u>.

3) After your NetID is fully activated (may take 48 hours), sign up for a placement test date. Once you are signed up, you will received further instructions via email on how to access the required placement test.

#### TESTING REGULATIONS

These tests are designed to assess your knowledge in these subjects. We need a true assessment of your abilities to enroll you into appropriate classes in which you can succeed. Therefore, reference materials <u>cannot</u> be used. No books, calculators, cell phones, or assistance of any kind is permitted. Test materials may not be copied or shared, as they are the copyright of Rutgers University. Scratch paper is permitted and should be discarded after testing. It cannot be submitted for credit.

The University will invalidate any test score if there is any reason to question its integrity. An incorrect placement due to purposeful misrepresentation of your score will result in a lower GPA or a delay in your graduation. We want you to succeed and encourage you to simply do your best work.

Each test can only be submitted once. Please make sure you are feeling well when you test.

#### PLACEMENT RESULTS

Your placements will be given to your school at RU. You can view them on the Enrollment Pathway or Degree Navigator within two weeks of completing required tests.

The following paragraphs will tell you more about the mathematics sections.

**Computation.** 30 minutes, 25 questions. This section of the test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts without the use of a calculator. The topics include whole numbers, fractions, decimals, percentages, and applications using arithmetic.

**Elementary Algebra.** 30 minutes, 25 questions. This section of the test measures your ability to perform basic algebraic operations and to solve problems that involve elementary algebraic concepts without the use of a calculator. The topics include operations with real numbers, polynomials, algebraic fractions and square root expressions; the use of the rules of exponents; factoring; solving equations, inequalities, and systems of equations; graphs of linear equations; and solving word problems.

**Precalculus**. 60 minutes, 35 questions. This section of the test covers intermediate algebra, functions, exponents, logarithms, and trigonometry. No calculators.

Many different kinds of multiple-choice questions are used in the tests.

See below for sample questions.

For placement test questions, please feel free to email us at <u>SASN\_advising@newark.rutgers.edu</u>.

#### **SAMPLE PROBLEMS FROM EACH SECTION:**

#### COMPUTATION

**Directions:** Solve each problem and indicate your answer choice in the corresponding oval. You may use blank paper for scratch work, but no calculators.

**1.** Of the following which is closest to:  $\sqrt{4,000}$ 

(A) 40 (B) 60 (C) 200 (D) 2,000

2. Which of the following is greatest?

(A) 
$$\frac{2}{8}$$
 (B)  $\frac{5}{12}$  (C)  $\frac{1}{2}$  (D)  $\frac{3}{8}$ 

**3.** 
$$\frac{3}{4}$$
 -  $\frac{1}{2}$  +  $\frac{2}{5}$  =

(A) 
$$\frac{3}{20}$$
 (B)  $\frac{4}{11}$  (C)  $\frac{4}{7}$  (D)  $\frac{13}{20}$ 

**4.** 23. 5 x 3. 04 =

- (A) 714. 4 (B) 79. 9 (C) 71. 44 (D) 7. 99
- 5. 16 is what percent of 80?

(A) 5% (B) 12.8% (C) 20% (D) 64%

**6.** Bill purchased a car and made a down payment of \$560. If the down payment was 1/5 of the purchase price, what was the purchase price?

(A) \$112 (B) \$2,240 (C) \$2,800 (D) \$4,480

#### ELEMENTARY ALGEBRA

**Directions:** Solve each problem and indicate your answer choice in the corresponding oval. You may use blank paper for scratch work, but no calculators.

**1.** If x = 4 and y = -2, then 
$$x^2y - xy^2 =$$
  
(A) 48 (B) 16 (C) -16 (D) -48  
**2.**  $\sqrt{18} + \sqrt{8} =$   
(A)  $\sqrt{26}$  (B)  $5\sqrt{2}$  (C) 10 (D) 12

**3.** If 
$$2x + 3(x - 2) = 30$$
, then  $x =$ 

(A) 
$$\frac{5}{36}$$
 (B)  $\frac{24}{5}$  (C)  $\frac{32}{5}$  (D)  $\frac{36}{5}$ 

**4.** One factor of  $3a^2 - 13a - 10$  is

(A) 
$$(3a+2)$$
 (B)  $(3a-5)$  (C)  $(a+2)$  (D)  $(a+5)$ 

**5.** If *A* represents the number of apples purchased at 15 cents each and *B* represents the number of bananas purchased at 10 cents each, which of the following represents the total purchase price in cents?

(A) 25AB (B) 25(A + B) (C) 15A + 10B (D) A + B

**6.** 
$$\frac{5}{a} + \frac{7}{b} =$$

(A) 
$$\frac{12}{a+b}$$
 (B)  $\frac{12}{ab}$  (C)  $\frac{5b+7a}{a+b}$  (D)  $\frac{5b+7a}{ab}$ 

#### PRECALCULUS

**Directions:** This part covers material in intermediate algebra and precalculus. Important note: if you have not taken a course that covers logarithms, exponents, and trigonometry, and if certain questions look completely unfamiliar to you, please do not guess on the answers. No calculators.

1. If 
$$f(x) = x^2 - 3x + 1$$
 then  $f(x-2) =$ 

(A)  $x^{3} - 5x^{2} + 7x - 2$ (B)  $x^{2} - 7x - 1$ (C)  $x^{2} - 7x + 11$ (D)  $x^{2} - 7x + 5$ (E)  $x^{2} - 2x - 1$ 

$$2. \quad \frac{2^{-1}x^{-1}y^{-2}}{xy^{-3}} = \frac{1}{2}$$

(A) 
$$\frac{1}{2y^2}$$
 (B)  $-\frac{2}{y}$  (C)  $-\frac{2y}{x^2}$  (D)  $-\frac{x^2}{2y}$   
E.  $\frac{y}{2x^2}$ 

**3.** In the graph of y = f(x) below, f(4) =



$$(A) - 1$$
  $(B) 1$   $(C) 2$   $(D) 3$   $(E) 4$ 

4. 
$$16^{-3/4} =$$
  
(A) 12 (B)  $\frac{1}{8}$  (C)  $\frac{1}{12}$  (D)  $-\frac{1}{8}$  (E). -12  
5. Given  $\log_a 3 = .5$ , then  $\log_a \left(\frac{1}{9}\right) =$   
(A) 0.25 (B) 0.025 (C)  $\frac{1}{a^2}$  (D). -1 (E). -2

# **6.** The figure below shows a portion of the graph of which of the following functions.



E.  $y = 3\sin(2x)$ 

### Key to Sample Questions

COMPUTATION: 1-B, 2-C, 3-D, 4-C, 5-C, 6-C ELEMENTARY ALGEBRA: 1-D, 2-B, 3-D, 4-A, 5-C, 6-D PRECALCULUS: 1-C, 2- E, 3-A, 4- B, 5-D, 6-C