

Math Placement Test
Study Guide and Instructions
April 19, 2018

The exam consists of 20 problems commonly encountered in algebra. Problems include computing using the order of operations, solving linear equations and inequalities, converting a word problem into a mathematical equation, combining algebraic fractions, solving equations involving rational expressions, solving equations involving radicals, simplifying algebraic expressions, multiplying polynomials, factoring polynomials, simplifying expressions using properties of exponents, calculating the equation of a line, and interval notation.

There is no time limit for completing the 20 problems. Students are encouraged to take their time.

Sample problems:

Sample 1: Combine the expressions into one fraction that is reduced to lowest terms. What is the coefficient of x in the numerator?

$$\frac{2}{2x+5} + \frac{3}{x}$$

- a. 2
- b. 4
- c. 6
- *d. 8
- e. 10

Sample 2: Which binomial is a factor of the polynomial?

$$a^2 - ab - 30b^2$$

- a. $(a - b)$
- b. $(a - 3b)$
- *c. $(a - 6b)$
- d. $(a - 10b)$
- e. $(a - 15b)$