Snow College Math Placement Policy

The Student Success Center, in cooperation with the Math Department, uses ACT scores and ACCUPLACER to aid with placement of students into appropriate math classes.

Usually, students are placed into math classes according to ACT Math scores as follows:

Math 0950	14 and below
Math 0990	15-17
Math 1010	18-22
Math 1030	23+
Math 1040	23+
Math 1050	23+

An ACT Math score of 28 or greater waives the general education math requirement, but all students are encouraged to continue to take math courses.

Accuplacer math placement testing may be used to place Non-traditional students who are admitted to Snow without ACT scores, students who have outdated ACT math scores (scores more than two years old), and high school students who want to challenge the ACT math score. Accuplacer may also be used to place students who have had math instruction since taking ACT tests or who have not had math for a long period of time.

Accuplacer math cut scores comparable to ACT math placement are as follows:

	Arithmetic	**Elementary Algebra**	**College Level Math**
Math 0950	N/A	0-39	0-19
Math 0990	N/A	40-53	20-39
Math 1010	100 or higher	54-89	40-49
Math 1030	-	90/120	50-69
Math 1040	-	90/120	50-69
Math 1050	-	90/120	50-69
Math 1210	N/A	N/A	90 or above

Accuplacer has three math components. Only one qualifying score is required to place in a course.

Accuplacer Test Policy

The Accuplacer Math Placement Test is given in the Lucy Phillips Testing Center on the Ephraim campus and in the Testing Center on the Richfield Campus. There is a $10 fee to be paid at the cashier's window prior to taking the test; the receipt is then to be taken to the testing center where the test is administered. Testing is done from 9:00 a.m. to 4:00 p.m. Monday through Friday. The test is a web-based multiple choice exam. It is not timed. A calculator is provided by the web application for selected problems. Otherwise, scratch paper and pencils are available. No other aids are allowed while testing. The test taker must turn off all electronic devices including cell phones and store all personal belongings and study materials. Scores are available immediately after testing.

Accuplacer Retest Policy

The Accuplacer can be taken once a day and there is a $10 fee each time it is taken.

Math Preparation Websites

www.Khanacademy.org free practice to prepare for Accuplacer

www.collegeboard.com/student/testing/accuplacer/index.html ACCUPLACER and sample questions.

www.testprepreview.com Free practice for standardized exams…

www.testprepreview.com/accuplacer_practice.html free practice to prepare for Accuplacer

www.coolmath.com Go to bottom of page and click on Math Help Lessons and tutorials

www.math.com

Tutorials: select math subject listed on the left; follow the guided learning steps, or click on practice and choose a topic or generate your own worksheet/answer key.

http://mymathtest.com (free online math test)

http://www.advancerlearning.com

www.mathworld.wolfram.com Math definitions and explanations

www.lavc.cc.ca.us/math/samples Diagnostic tests for Math, Reading, ATB

www.mathconnect.com/Math_Tutor.htm Tutoring in various areas of math. (free login required)

www.purplemath.com Tutorials: click on Lessons: How do you really do this stuff? –pick a topic- explore other links.

www.teacherschoice.com.au/mathematics_how-to_library.htm -Lots of explanations about math topics. Easy to understand, but practice items are hard to access. They would like to sell you some software.

http://www.southtexascollege.edu/dev-math/THEA/Version1 Math practice test from the state of Texas

http://algebratutor.org Mrs. Lindquist online computer tutor

www.interactmath.com

http://www.jc-schools.net/tutorials/interact-math.htm

http://www.math.com/homeworkhelp/algebra.html

www.UEN.org

Math Anxiety

www.mathacademy.com/pr/minitext/anxiety/ Manigault article on math anxiety myths

www.math.com/students/advice/anxiety.html

www.time4learning.com/math-anxiety.html

Math Fun Websites

http://library.thinkquest.org/16661/escher/tessellations.1.html Fun math application: fractals

http://mathworld.wolfram.com/topics/Algebra.html Explore fun math application

www.math.com/students/wonders.html Explore wonders of math: fractals, spirographs, knots, origami, mazes, Roman numeral calculator, etc.

www.mathacademy.com Click on the title: Platonic Realms; explore math games; info, articles, Manigault math anxiety article

Arithmetic

This test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts. There are 17 questions on the Arithmetic tests, divided into three types.

- o Operations with whole numbers and fractions: Topics included in this category are addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers, and estimating.
- o Operations with decimals and percents: Topics include addition, subtraction, multiplication, and division with decimals. Percent problems, recognition of decimals, fraction and percent equivalencies, and problems involving estimation are also given.
- o Applications and problem solving: Topics include rate, percent, and measurement problems; simple geometry problems; and distribution of a quantity into its fractional parts.

Arithmetic Sample Questions

Solve the following problems and select your answer from the choices given. You may use the paper you have been given for scratch paper.

1. 2.75 + .003 + .158 =
   - A. 4.36
   - B. 2.911
   - C. 0.436
   - D. 2.938

2. 7.86 × 4.6 =
   - A. 36.156
   - B. 36.216
   - C. 351.56
   - D. 361.56

3. 7/20 =
   - A. 0.035
   - B. 0.858
   - C. 0.35
   - D. 3.5

4. Which of the following is the least?
   - A. 0.105
   - B. 0.501
   - C. 0.015
   - D. 0.15

5. All of the following are ways to write 25 percent of N EXCEPT
   - A. 0.25 N
   - B. 25N/100
   - C. 1/4N
   - D. 25 N

6. Which of the following is closest to 27.8 × 9.6?
   - A. 280
   - B. 300
   - C. 2,800
   - D. 3,000

7. A soccer team played 160 games and won 65 percent of them. How many games did it win?

A. 94
B. 104
C. 114
D. 124

8. Three people who work full-time are to work together on a project, but their total time on the project is to be equivalent to that of only one person working full-time. If one of the people is budgeted for one-half of his time to the project and a second person for one-third of her time, what part of the third worker's time should be budgeted to this project?

A. 1/3
B. 3/5
C. 1/6
D. 1/8

9. 32 is 40 percent of what number?

A. 12.8
B. 128
C. 80
D. 800

10. $3\frac{1}{3} - 2\frac{2}{5} =$

A. $1\frac{1}{2}$
B. $\frac{1}{15}$
C. $\frac{14}{15}$
D. $1\frac{1}{15}$

Elementary Algebra

A total of 12 questions of three types are administered in this test.

- The first type involves operations with integers and rational numbers, and includes computation with integers and negative rationals, the use of absolute values, and ordering.
- The second type involves operations with algebraic expressions using evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials. Questions involve multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring.
- The third type of question involves translating written phrases into algebraic expressions and solving equations, inequalities, word problems, linear equations and inequalities, quadratic equations (by factoring), and verbal problems presented in an algebraic context.

Elementary Algebra Sample Questions

Solve the following problems and select your answer from the choices given. You may use the paper you have been given for scratch paper.

1. 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 value of the purchases in cents?

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

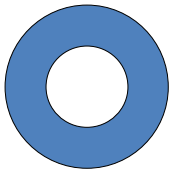
2. $\sqrt{2} \times \sqrt{15} = ?$

A. 17
B. 30
C. $\sqrt{30}$
D. $\sqrt{17}$

3. What is the value of the expression $2x^2 + 3xy - 4y^2$ when $x = 2$ and $y = -4$?

A. -80
B. 80
C. -32
D. 32

4. In the figure below, both circles have the same center, and the radius of the larger circle is R. If the radius of the smaller circle is 3 units less than R, which of the following represents the area of the shaded region?



A. πR^2
B. $\pi(R - 3)^2$
C. $\pi R^2 - \pi \times 3^2$
D. $\pi R^2 - \pi(R - 3)^2$

5. $(3x - 2y)^2 =$

A. $9x^2 - 4y^2$
B. $9x^2 + 4y^2$
C. $9x^2 + 4y^2 - 6xy$
D. $9x^2 + 4y^2 - 12xy$

6. If $x > 2$, then $x^2 - x - 6 / x^2 - 4 =$

A. $x - 3 / 2$
B. $x - 3 / x - 2$
C. $x - 3 / x + 2$
D. $3 / 2$

7. $4 - (6) / -5 =$

A. $2 / 5$
B. $- 2 / 5$
C. 2
D. – 2

8. If $2x - 3(x + 4) = -5$, then $x =$

A. 7
B. – 7
C. 17
D. – 17

9. $- 3(5 - 6) - 4(2 - 3) =$

A. – 7
B. 7
C. – 1
D. 1

10. Which of the following expressions is equivalent to $20 - 4 / 5\ x \geq 16$?

A. $x \leq 5$
B. $x \geq 5$
C. $x \geq 32\ ½$
D. $x \leq 32\ ½$

College-Level Mathematics Test

The College-Level Mathematics test measures your ability to solve problems that involve college-level mathematics concepts. There are six content areas measured on this test: (a) Algebraic Operations, (b) Solutions of Equations and Inequalities, (c) Coordinate Geometry, (d) Applications and other Algebra Topics, (e) Functions, and (f) Trigonometry. The Algebraic Operations content area includes the simplification of rational algebraic expressions, factoring and expanding polynomials, and manipulating roots and exponents. The Solutions of Equations and Inequalities content area includes the solution of linear and quadratic equations and inequalities, systems of equations, and other algebraic equations. The Coordinate Geometry content area presents questions involving plane geometry, the coordinate plane,

straight lines, conics, sets of points in the plane, and graphs of algebraic functions. The Functions content area includes questions involving polynomial, algebraic, exponential, and logarithmic functions. The Trigonometry content area includes trigonometric functions. The Applications and other Algebra Topics content area contains complex numbers, series and sequences, determinants, permutations and combinations, factorials, and word problems. A total of 20 questions are administered on this test.

Sample Questions

Solve the problem. Use the paper you were given for scratchwork.

1. $2^{5/2} - 2^{3/2}$
   A. $2^{1/2}$
   B. 2
   C. $2^{3/2}$
   D. $2^{5/3}$
   E. 2^{2}

2. If $a \neq b$ and $1/x + 1/a = 1/b$, then $x =$
   A. $1/b - 1/a$
   B. $b - a$
   C. $1/ab$
   D. $a - b/ab$
   E. $ab/a - b$

3. If $3x_2 - 2x + 7 = 0$, then $\left(x - 13\right)^{2} =$
   A. 20/9
   B. 7/9
   C. -7/9
   D. - 8/9
   E. - 20/9

4. The graph of which of the following equations is a straight line parallel to the graph of $y = 2x$?
   A. $4x - y = 4$
   B. $2x - 2y = 2$
   C. $2x - y = 4$
   D. $2x + y = 2$
   E. $x - 2y = 4$

5. An equation of the line that contains the origin and the point (1, 2) is
   A. $y = 2x$
   B. $2y = x$
   C. $y = x - 1$
   D. $y = 2x + 1$
   E. $y/2 = x - 1$

6. An apartment building contains 12 units consisting of one- and two-bedroom apartments that rent for $360 and $450 per month, respectively. When all units are rented, the total monthly rental is $4,950. What is the number of two-bedroom apartments?
   A. 3
   B. 4
   C. 5
   D. 6
   E. 7

7. If the two square regions in the figures below have the respective areas indicated in square yards, how many yards of fencing are needed to enclose the two regions?

A. $4\sqrt{130}$
B. $20\sqrt{10}$
C. $24\sqrt{5}$
D. 100
E. $104\sqrt{5}$

8. If $\log_{10} x = 3$, then $x =$

A. 3^{10}
B. 1,000
C. 30
D. 10/3
E. 3/10

9. If $f(x) = 2x + 1$ and $g(x) = x - 1/2$, then $f(g(x)) =$

A. x
B. $x - 1/4x + 2$
C. $4x + 2/x - 1$
D. $5x + 1/2$
E. $(2x + 1)(x - 1)/2$

10. If θ is an acute angle and $\sin \theta = 12$, then $\cos \theta =$

A. -1
B. 0
C. 1/2
D. $\sqrt{3}/2$
E. 2

Answer Key

CLM	
QUESTION NUMBER	CORRECT ANSWER
1	C
2	E
3	E
4	C
5	A
6	E
7	C
8	B
9	A
10	D

ARITHMETIC	
QUESTION NUMBER	CORRECT ANSWER
1	B
2	A
3	C
4	C
5	D
6	A
7	B
8	C
9	C
10	C

ELEMENTARY ALGEBRA	
QUESTION NUMBER	CORRECT ANSWER
1	D
2	C
3	A
4	D
5	D
6	B
7	D
8	B
9	B
10	A