Math Decision Chart

For Assessment Purposes

Use this guide to help you decide which level of the SAC math placement test is best for you, then be sure to do your best on the test. To review your math skills before testing, go to www.sac.edu/assessmentcenter. Accurate course placement will help you succeed in college.

Your Previous Math Background	Your Recommended Math Placement Test	You may have the best chance of success in these courses
Little or no **Algebra** or Some **Algebra** but not recently	**LEVEL I** Algebra Readiness	Essential Math – Math N06 Pre-Algebra – Math N48 (**SCC only**) Elem. Algebra – Math N60 (**SAC only**) Beg. & Int. Algebra – Math 083/084 **(no minimum score needed)**
One year of **Algebra** and one year of **Geometry** completed recently.	**LEVEL II** Elementary Algebra Diagnostic	Beg. & Int. Algebra – Math 083/084 (SCC ONLY) Intermediate Algebra – Math 080/081 **(minimum score of 17 needed to place in lowest class in this level)**
One or two years of **Algebra** but not recently, need to review before advancing to the next level.		
Two years of **Algebra** and One year of **Geometry** completed recently	**LEVEL III** Intermediate Algebra Diagnostic	Liberal Arts Math – Math 105 College Algebra – Math 140 Business Calculus – Math 150 Math 210 Statistics – Math 219 **(minimum score of 18 needed to place in lowest class in this level)**
Two years of **Algebra** and One year of **Geometry** and **Trigonometry** or **Math Analysis** or **Pre-calculus** completed recently.	**LEVEL IV** Pre-calculus Diagnostic	Trigonometry – Math 162 ****Calculus – Math 180 **(minimum score of 16 needed to place in lowest class in this level)**

You may take each level only once every semester.

** Trigonometry Pre-requisite

Sample Questions

Level I Exam

• What number multiplied by 6 gives -18 as a result?

(A) -12 (B) -3
(C) 3 (D) -54

• 4(b + 2) =

(A) 4b + 2 (B) b + 6
(C) b + 8 (D) 4b + 8

• Jim wrote a check for $318. If his balance was then $2126. what was his balance before he wrote this check?

(A) $808 (B) $1808
(C) $2444 (D) $5306

Level II Exam

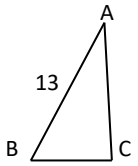
• If 6x – 3 = 8x – 9, then x =

(A) -6 (B) -3 (C) 3
(D) $-\frac{6}{7}$ (E) $\frac{6}{7}$

• One of the factors of $x^2 - x - 6$ is

(A) x + 3 (B) x +2 (C) x -1
(D) x – 2 (E) x - 6

• In the right triangle to the right, what is the length of AC?



(A) 8 (B) 12
(C) 18 (D) $\sqrt{18}$ (E) $\sqrt{194}$

Level III Exam

• $\sqrt{3} + \sqrt{27}$ =

(A) 6 (B) $3\sqrt{3}$ (C) $4\sqrt{3}$
(D) $\sqrt{30}$ (E) $10\sqrt{3}$

• $\frac{c-d}{\frac{1}{d}-\frac{1}{c}}$

(A) $\frac{c-d}{dc}$ (B) $\frac{dc}{c-d}$ (C) dc
(D) -dc (E) $\frac{1}{dc}$

• If $\log_{10} x + \log_{10} y = 3$. then xy =

(A) 0.001 (B) 1.0 (C) 10
(D) 100 (E) 1000

Level IV Exam

• If $\sin\theta = \frac{3}{5}$ and $0 \leq \theta \leq \frac{\pi}{2}$ then $\tan\theta =$

(A) $\frac{3}{2}$ (B) $\frac{4}{3}$ (C) $\frac{5}{4}$
(D) $\frac{4}{5}$ (E) $\frac{3}{4}$

• $\log_3 27$ =

(A) 81 (B) 9 (C) 3
(D) $\frac{1}{3}$ (E) $\frac{1}{9}$

• If f(x) = 2x + 5 and $g(x) = 1 - x^2$ then f(g(2)) =

(A) -3 (B) -1 (C) 1
(D) 2 (E) 9

Answers: **I: B, D, C** **II: C, B, B** **III: C, C, E** **IV: E, C, B**