

Date \_\_\_\_\_

Name \_\_\_\_\_

G# \_\_\_\_\_

CLASS PLACEMENT \_\_\_\_\_

Reviewer or Counselor \_\_\_\_\_

## CAÑADA COLLEGE MATH GUIDED SELF-PLACEMENT

### **Introduction**

This form is to help you understand the type of math background you need to know in order to succeed in your college math courses, based on your major goals. If your major falls under Business, Science, Technology, Engineering and Mathematics (BSTEM), then you should look at the first set of questions. Otherwise you should answer the second set of questions, related to Statistics and Liberal-Arts Mathematics (SLAM).

Please look at the following questions and try to assess how familiar you are with the type of question being asked and answer accordingly, with an A, B, or C:

- A) I can answer this question quickly.
- B) With time and preparation, I can answer this question.
- C) I have no idea how to begin this question.

While your answers do not determine your placement, your honest assessment of your own understanding of these concepts will help you and your counselor to determine which class will be the best for you!!

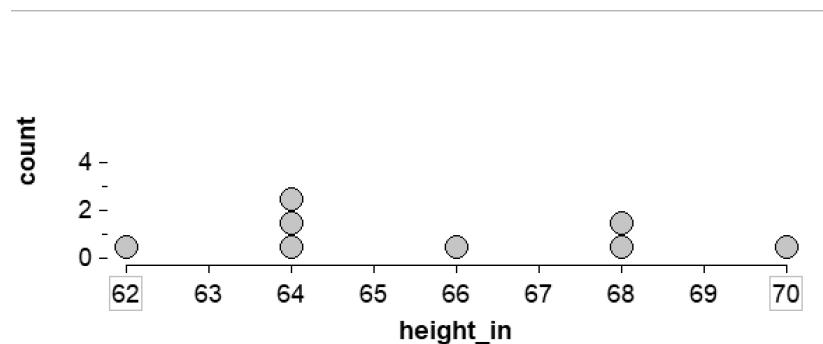
### **BSTEM Questions**

- 1. Write the equation of a line passing through the points (5,-1) and (2,3)
- 2. Identify the slope and the Y-intercept of the line  $y = \frac{-2}{3}x + 5$
- 3. If a line has slope  $= \frac{1}{4}$  and passes through the point (-1,-3) find its equation.
- 4. Factor the following expressions:  $x^2 - 5x + 6$  and  $a^3 - 3a^2 + a - 3$ .
- 5. Write using positive exponents only:  $\frac{a^2b^{-3}}{c^{-1}d}$
- 6. Evaluate  $4 \cdot (-3)^2 + 1 - 2^2$
- 7. Simplify the expression to the extent possible:  $3x^2 - 7x + 2x^2 + 6x - 5x^2 + 2$
- 8. Find the value of x that is a solution for:  $\frac{2x-3}{x+5} = \frac{4}{5}$
- 9. Rewrite the expression using radicals:  $x^{2/3}y^{1/3}$
- 10. Simplify as much as possible:  $7 + 2\sqrt{3} - 4\sqrt{2} + 5\sqrt{3}$
- 11. Solve the quadratic equation  $2x^2 - 5x + 2 = 0$

## SLAM Questions

1. 52 of 127 community college students surveyed stated that they work full time (40 hours or more) outside of school. What percentage of the student's surveyed work full time?

2. Eight students' heights were recorded and displayed in the dot plot below. Which height occurs the most frequently?



3. A student received a score of 80, 90, 92, and 100 on 4 exams that she took throughout the semester. What average score did this student receive?

4. 32% of a group of 127 adults have been diagnosed with Type-II diabetes. What number of these 127 adults had been diagnosed with Type-II diabetes?

5. Using the pie chart displayed below, what percentage of those surveyed said that they did NOT smoke a cigarette in the past year?

