



Office of
Research & Planning

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Research Briefs from the Office of Institutional Research CHC MATH-250 Success Related to Success in MATH-151 at Valley

Purpose: The purpose of this brief is to examine the relationship of how success in MATH-250 (Single Variable Calculus I) at Crafton is related to students who have successfully completed MATH-151 (Pre-Calculus) at San Bernardino Valley College. In the brief the following questions are examined:

1. During the past five academic years, how many students who have a grade on record (GOR, A, B, C, D, F, NP, P, I, or W) in MATH-250 at Crafton took Math-151 at Valley?
2. Of the students who took MATH-151 at Valley, how many took MATH-103 (Plane Trigonometry) at Crafton or Valley and how many did not?
3. What is the Crafton MATH-250 success rate of the Valley MATH-151 students who did and did not take MATH-103?
4. What is the Crafton MATH-250 success rate of the students who took MATH-151 at Valley and those who did not?

Summary of Findings:

Question	Answer
1. During the past five academic years, how many students who have a grade on record (GOR) in MATH-250 at Crafton took Math-151 at Valley?	359 students earned a GOR in MATH-250 from 2005-2006 to 2009-2010 and 21 (5.8%) also earned a GOR in MATH-151 at Valley.
2. Of the students who took MATH-151 at Valley, how many took MATH-103 (Plane Trigonometry) at Crafton or Valley and how many did not?	21 of the 21 students who earned a GOR in MATH-151 also earned a GOR in MATH-103 at either Crafton or Valley. 20 of the 21 (95%) students successfully completed MATH-151.
3. What is the Crafton MATH-250 success rate of the Valley MATH-151 students who did and did not take MATH-103?	All of the Valley MATH-151 students earned a GOR in MATH-103.
4. What is the Crafton MATH-250 success rate of the students who took MATH-151 at Valley and those who did not?	75% of the Valley MATH-151 students successfully completed MATH-250 and 74% of the students who did not take MATH-151 at Valley successfully complete MATH-250.

Table 1: Crafton MATH-250 Success of Valley MATH-151 Students Compared to All Other Crafton MATH-250 Students from 2005 – 2006 to 2009 - 2010.

MATH-151 at Valley			All Other GOR			MATH-250 (All GOR)			P Value	Effect Size
#	GOR	%	#	GOR	%	#	GOR	%		
15	20	75.0	275	374	73.5	290	394	73.6	.885	-.03

Note: 20 of the 21 (95%) MATH-151 students successfully completed MATH-151 and 19 of the 20 (95%) MATH-151 students also successfully completed MATH-103. The MATH-151 student who did not earn a GOR in MATH-103 did successfully complete MATH-250 at CHC. The number of GOR of 394 does not match the number of students who MATH-250 (359) because 31 students took the course twice and two took the course three times. “#” refers to the number successful, GOR refers to the number of grades on record, and “%” refers to the success rate (i.e. # successful / GOR * 100).