

Mathematical background and goals

- 12 I took trigonometry at De Anza or another college.
- 18 I took precalculus at De Anza or another college.
- 17 I took Math 49B at De Anza.
- 12 I took the Calculus Readiness Test at De Anza, and was allowed to take Math 1A immediately.
- 27 I took Math 1A at De Anza.
- 13 I passed calculus in high school, at another college, or elsewhere.
- 8 I have taken Math 1B at De Anza or another college before, and received either a D, F or W.
- 18 I have often used calculators for graphing in my previous math classes.
- 11 I have often used calculators for common trigonometric values (eg. $\sin \pi/3$, $\cos \pi/4$, $\tan \pi/6$) in my previous math classes.
- 10 I have often used calculators for arithmetic in my previous math classes.
- 26 I am hoping to gain a very thorough grasp of integral calculus.
- 6 I just want to learn enough to pass.
- 23 I plan to take Math 1C.
- 18 I plan to take Math 1D.
- 17 I plan to take Math 2A.
- 18 I plan to take Math 2B.

The grade I am working towards for this class is A+ A B C Pass

Study Habits

- 4 I believe I can do well in math without much studying or homework.
- 6 I read the textbook every day (and not just to see the homework problems).
- 13 I do homework at least 4 days each week.
- 12 I have averaged 10 hours or more per week of homework, reading and studying since the start of the quarter.
- 14 I do (but not necessarily finish) homework no more than 24 hours after the corresponding lecture.
- 19 I rarely refer to the solution manual before I complete a problem.
- 14 I do quite a few problems which are not assigned as homework.
- 3 I do my homework with other people and exchange ideas (not just listen to their ideas).
- 3 I have an individual tutor for this class.
- 11 I have tried or would like to try group tutoring for this class.
- 11 In preparing for tests, I do problems without knowing what section of the book they come from.
- 22 After I learn how to do a type of problem, I work on doing them faster.

Circle all the graphs you can sketch the shape and position of, and can identify the intercepts and asymptotes of, without a calculator and without finding a list of points. (chapter 5)

$y = x^3$	$y = \sqrt{x}$	$y = 1/x$	$y = 1/x^2$	$y = (x+2)^2$	$y = x^2 - 2$	$y = x^2 - 2x$
25	16	25	13	22	24	18
$y = e^x$	$y = e^{-x}$	$y = \ln x$	$y = \tan x$	$y = \sin^{-1} x$	$y = \tan^{-1} x$	$4x^2 + 9y^2 = 36$
19	13	18	20	11	12	22

Which of the following concepts/values/identities/formulae do you know EXACTLY without looking up or using a calculator ?

- 21 the Pythagorean identity involving sine and cosine (chapter 6)
- 18 the other 2 Pythagorean identities involving the other trigonometric functions (chapter 6)
- 24 the sine, cosine and tangent of $0, \pi/6, \pi/4, \pi/3, \pi/2$ (the common angles in quadrant 1) (chapter 6)
- 20 the sine, cosine and tangent of the common angles in quadrants 2, 3, 4 (chapter 6)
- 19 the formula for $\sin 2x$ (chapter 6)
- 14 all 3 formulae for $\cos 2x$ (chapter 6)
- 14 how to factor a polynomial using synthetic division
- 25 the quadratic formula (chapter 6)
- 18 how to determine if a function is even or odd from its graph
- 17 how to determine if a function is even or odd from its formula
- 23 how to determine if a function is one-to-one from its graph
- 9 how to determine if a function is onto from its graph
- 25 the range of $y = x^2$
- 22 the domain of $y = \tan x$ (chapter 6)
- 12 the asymptotes of $y = \tan^{-1} x$ (chapter 6)
- 26 how to find and classify the local/relative maximum or minimum of a function from its formula
- 21 how to find and classify the global/absolute maximum or minimum of a function from its formula
- 9 how to prove the formula for the derivatives of $y = \sin^{-1} x$ and $y = \tan^{-1} x$ (hyperbolic supplement)
- 15 what the Intermediate Value Theorem says, and when it does and doesn't apply
- 16 what the Mean Value Theorem says, and when it does and doesn't apply
- 11 what the Extreme Value Theorem says, and when it does and doesn't apply
- 10 the algebraic definition of continuity (3 conditions)
- 16 how to find the linear approximation of a function (chapter 7)
- 21 the 2 indeterminate quotient forms that L'Hopital's Rule applies to (chapter 6)
- 12 the other 4 indeterminate forms that L'Hopital's Rule applies to (chapter 6)
- 28 how to find the x- and y-intercepts of a function from its formula (chapter 5)
- 24 how to find the vertical asymptotes of a function from its formula (chapter 6)
- 23 how to find the horizontal asymptotes of a function from its formula
- 11 Leibniz notation for the second derivative of a function