

# Department of Mathematics, University of California, San Diego

## PRELIMINARY DEGREE CHECK

### MAJOR in MATHEMATICS-SECONDARY EDUCATION (MA32)

Name: \_\_\_\_\_ PID: \_\_\_\_\_

Admit quarter: \_\_\_\_\_ Graduating Quarter: \_\_\_\_\_ Major GPA: \_\_\_\_\_

#### Lower-Division Requirements

**Mathematics (24 units total):**

1. Math 20A Calc for Sci & Eng .....
2. Math 20B Calc for Sci & Eng .....
3. Math 20C/31BH Calc & Analyt. Geom .....
4. Math 20D Intro to Diff. Eqns .....
5. Math 20E/31CH Vector Calculus .....
6. Math 20F/31AH Linear Algebra .....

**One of the following is recommended:**

- CSE 8A-AL-B Intro to Comp Sci: Java .....
- MAE 9 C/C++ Programming .....

#### Upper-Division Requirements - 13 courses

1. Math 109 Mathematical Reasoning
2. Math 104A Number Theory
3. Math 163 History of Mathematics
4. EDS 129A-B-C Pre-Internship Practicum in Teaching
5. One of the following:
  - Math 155A Computer Graphics OR
  - Math 170A Intro to Num Analysis: Linear Algebra OR
  - Math 187 Introduction to Cryptography
6. One of the following:
  - Math 180A Introduction to Probability OR
  - Math 183 Statistical Methods (duplication of credit with Math 180A)
7. One of the following:
  - Math 150A Differential Geometry OR
  - Math 151 Topics in Geometry OR
  - Math 153 Geometry for Secondary Teachers OR
  - Math 190 Introduction to Topology
8. One of the following:
  - Math 100A Abstract Algebra OR
  - Math 102 Applied Linear Algebra OR
  - Math 103A Modern Applied Algebra
9. One of the following:
  - Math 140A Foundations of Real Analysis
  - Math 142A Introduction to Analysis
10. One sequence from the following list:
  - 100A-B, 103A-B, 103A-102, 104A-B, 110A-120A, 110A-130A, 110A-110B, 120A-B, 130A-110B, 130A-B, 140A-B, 142A-B, 150A-B, 152-154, 152-184A, 154-184A, 155A-B, 170A-B, 170A-175, 170A-179, 170A-171A, 171A-B, 180A-B, 180A-181A, 193A-B.

#### Course Selections

1. Math 109 (4 units) .....
2. Math 104A (4 units) .....
3. Math 163 (4 units) .....
4. EDS 129A (4 units) .....
- EDS 129B (4 units) .....
- EDS 129C (4 units) .....
5. Math \_\_\_\_\_ (4 units) .....
6. Math \_\_\_\_\_ (4 units) .....
7. Math \_\_\_\_\_ (4 units) .....
8. Math \_\_\_\_\_ (4 units) .....
9. Math \_\_\_\_\_ (4 units) .....
10. Math \_\_\_\_\_ (4 units) .....
- Math \_\_\_\_\_ (4 units) .....

#### Mathematics Department Evaluation

Comments: \_\_\_\_\_

Advisor: \_\_\_\_\_

Date: \_\_\_\_\_