

# Minimal DFA's for Divisibility Testing

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## 1 Introduction

## 2 Non-Distinguishability Criteria

### 2.1 Initial ND Criteria

### 2.2 Revised ND Criteria

2.2.1 Lemma:  $a^{-1}$  exists mod  $p$  if  $a, p$  are coprime

2.2.2 Proof Of Equivalence

## 3 Equivalence Relation Classes

## 4 Even Numbers