FOR TEACHERS ONLY

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

THREE-YEAR SEQUENCE FOR HIGH SCHOOL MATHEMATICS

COURSE I

Wednesday, June 17, 1998 — 9:15 a.m. to 12:15 p.m., only

SCORING KEY

Use only *red* ink or *red* pencil in rating Regents papers. Do not attempt to *correct* the student's work by making insertions or changes of any kind. Use checkmarks to indicate student errors.

Unless otherwise specified, mathematically correct variations in the answers will be allowed. Units need not be given when the wording of the questions allows such omissions.

Part I

Allow a total of 60 credits, 2 credits for each of 30 of the following. [If more than 30 are answered, only the first 30 answered should be considered.] Allow no partial credit. For questions 14–35, allow credit if the student has written the correct answer instead of the numeral 1, 2, 3, or 4.

(1) 105	(11) 120	(21) 3	(31) 4
(2) 900	(12) 20	(22) 2	(32) 1
(3) $n + 3$	(13) $-\dfrac{b}{a}$	(23) 2	(33) 2
(4) $(x - 4)(x + 7)$	(14) 1	(24) 4	(34) 2
(5) 18	(15) 4	(25) 4	(35) 4
(6) –3	(16) 1	(26) 3	
(7) 240	(17) 3	(27) 1	
(8) 80	(18) 3	(28) 3	
(9) $\dfrac{b - c}{a}$	(19) 4	(29) 2	
(10) 9.5	(20) 1	(30) 2	

Part II

Please refer to the Department's publication *Guide for Rating Regents Examinations in Mathematics*, 1996 Edition. Care should be exercised in making deductions as to whether the error is purely a mechanical one or due to a violation of some principle. A mechanical error generally should receive a deduction of 10 percent, while an error due to a violation of some cardinal principle should receive a deduction ranging from 30 percent to 50 percent, depending on the relative importance of the principle in the solution of the problem.

(36) *b* 45   [3]

(37) *a* $p \to q$ [1]
    b $q \to p$ [1]
    c $\sim p \to \sim q$ [1]
    d Truth table(s)   [6]
       Yes   [1]

(38) $x = 10$
    $y = 20$ [8]
    Check   [2]

(39) *c* $\dfrac{15}{40}$ [2]
    d Yes, the 80th percentile would be the 32nd person and that person is in interval 40–49.   [1,1]

(40) $4 per bag of potatoes
    $7 per case of corn   [10]

(41) 123   [10]

(42) Analysis   [4]
    15, 40   [6]