PROBLEMS ON AVERAGE OF A SET OF NUMBERS

I.6 A student takes 5 exams, each worth 100 points. The average of the first 3 exams was 90 and of all 5 was 88. What was the average of the last two exams?
(a) 80 (b) 82 (c) 84 (d) 85 (e) 86

II.12 A student took 6 exams. If the average on the first 3 exams was 82, and the average on the next two was 87, what score did the student need on the last exam to have an average of 85 for all six exams?
(a) 84 (b) 86 (c) 87 (d) 88 (e) 90

III.7 A student took four one hour exams and a two hour final exam equivalent to two one hour exams. If the student averaged 80 on the four one hour exams and 84 on all exams, what was the score on the final exam?
(a) 86 (b) 88 (c) 90 (d) 92 (e) 94

IV.5 If Jane scores 82 on exam 1 and 90 on exam 2, then what must be her average on the next 3 exams to have an average of 92 for the 5 exams?
(a) 95 (b) 94 (c) 96 (d) 98 (e) 100

V.6 A class consists of 21 boys and 9 girls. On an exam the average of the class was 84 and the average of the boys was 80. The integer nearest to the average of the girls is (a) 86 (b) 87 (c) 89 (d) 91 (e) 93

VI.1 A student took a sequence of exams, and the scores on the exams formed an arithmetic progression. If the average of the first two exams was 78, and the average of the first three exams was 80, then the difference in the scores of the first and second exam was
(a) 2 (b) 3 (c) 4 (d) 6 (e) cannot be determined from the given information.

VII.1 Given a set of four numbers, if one is 20, another is 40, the other two differ by 4, and the average of the four numbers is 35, then the largest number in the set is (a) 40 (b) 41 (c) 42 (d) 43 (e) 44

VIII.1 On an exam the 30 Honor Society Students made an average of 80 and the 16 Math Society Students made an average of 86. If 10 of the students who took the test were in both the Honor and Math Societies, and the average of all students was 81, then the average of those 10 in both societies was
(a) 80 (b) 82 (c) 84 (d) 86 (e) 88

IX.1 Given a set of three numbers, if the average of all three is 80, the average of the first two is 76, and the first is ten more than the second, then the smallest number of the three is
(a) 71 (b) 73 (c) 75 (d) 77 (d) 79

X.1 Mary averaged 66% on three mathematic exams, 80% on two English exams, and 91% on four history exams. Her average c^n all nine exams is nearest the integer
(a) 72 (b) 78 (c) 80 (d) 82 (e) 84