

## Item Analysis

The following problem had the highest number of correct responses (105 of the 107 students), and is therefore considered the easiest question on the written test.

Test Problem #2: What number is four hundred one less than five hundred fifty-three?

- a) 152   b) 352   c) 552   d) 752   e) 952

Since only 14 students answered the following problem correctly, the following problem is considered the most difficult problem on the written test.

Test Problem #27: Natalie has attempted 24 free-throws and completed 62.5% of them. How many consecutive free-throws will she have to complete if she wants to have an average above 75%?

- a) 3   b) 7   c) 10   d) 12   e) 13

As for the Individual Cipherring problems, the easiest problem was the first one with 101 out of 107 correct answers.

Individual Cipherring #1: If a group of 48 players are divided into teams with an equal number of players on each team, how many more 6-member teams can be formed than 8-member teams?

However, only 21 students answered the following problem correctly.

Individual Cipherring #10: How many numbers are in the sequence 14, 29, 44, ..., 2009, 2024?

For the Pair Cipherring questions, the students work with a partner. In each round, they receive four problems at once to work on together.

Of the 46 pairs of students participating in the pair cipherring round, 30 pairs answered the following correctly:

Pair Cipherring #1-4: Arthur reads two books each week. D.W. reads one book every two months. In a year, Arthur reads how many more books than D.W.?

Only two pairs answered this question correctly:

Pair Cipherring #1-3: What is the degree measure of each interior angle of a regular polygon with 9 diagonals?

Answers: A; E; 2; 135; 120; 98