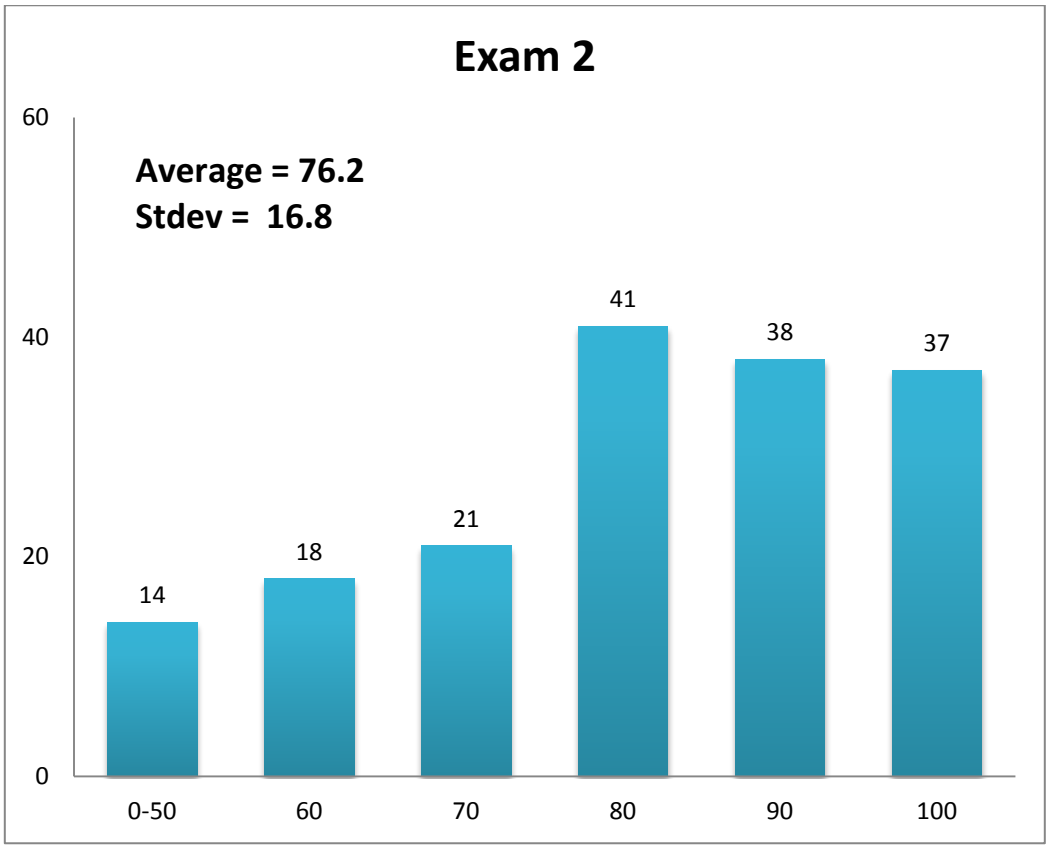
Report of Exam 2

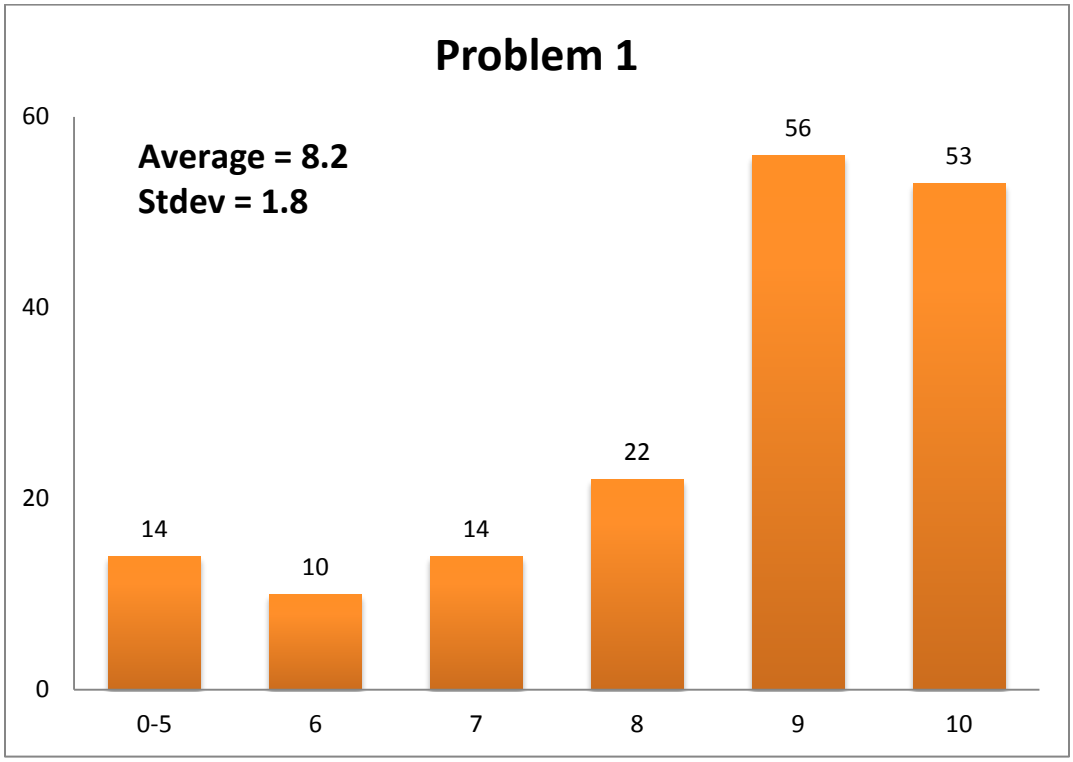
1. Summary

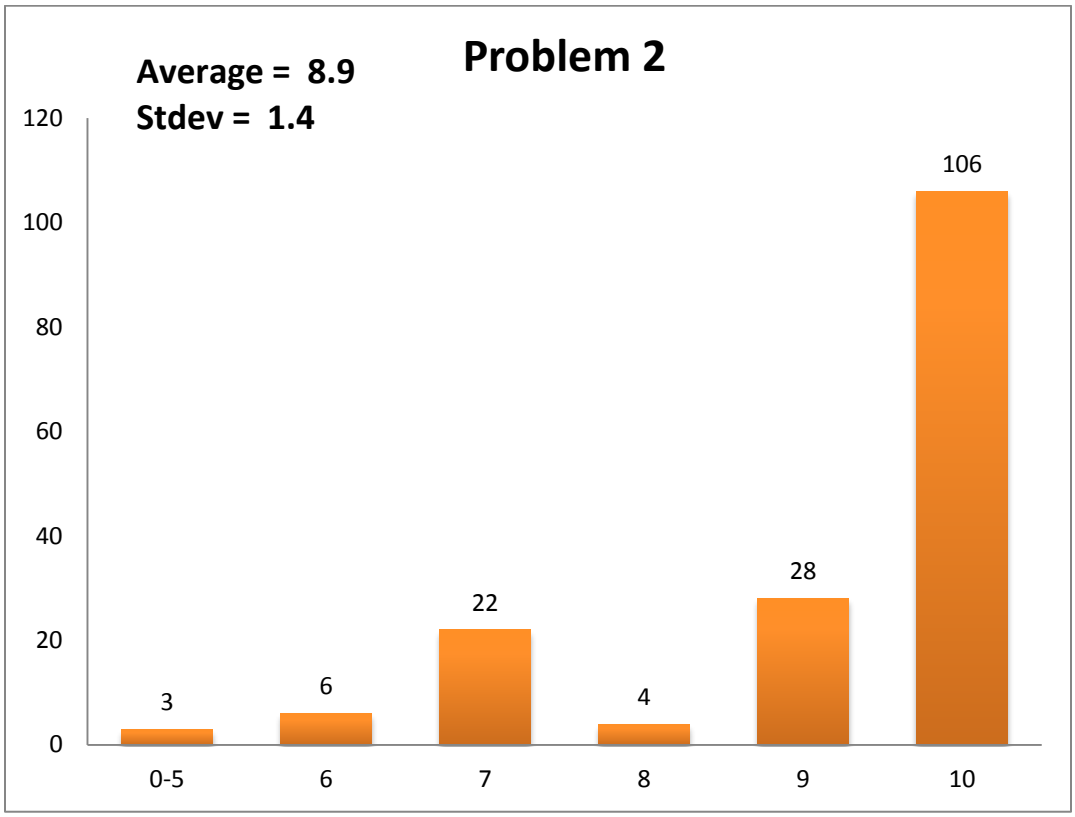
	Number of Students
Total	171
Attended	169
Missed	1
Makeup	1

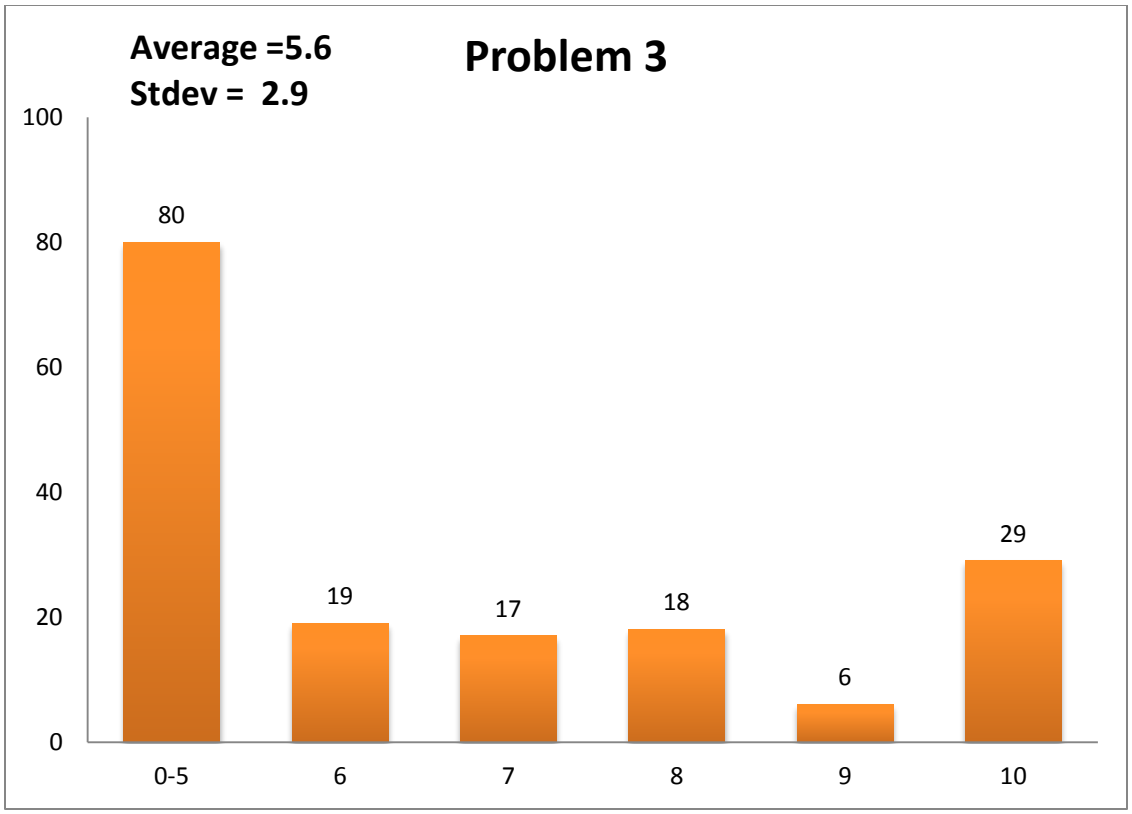
2. Overall distribution

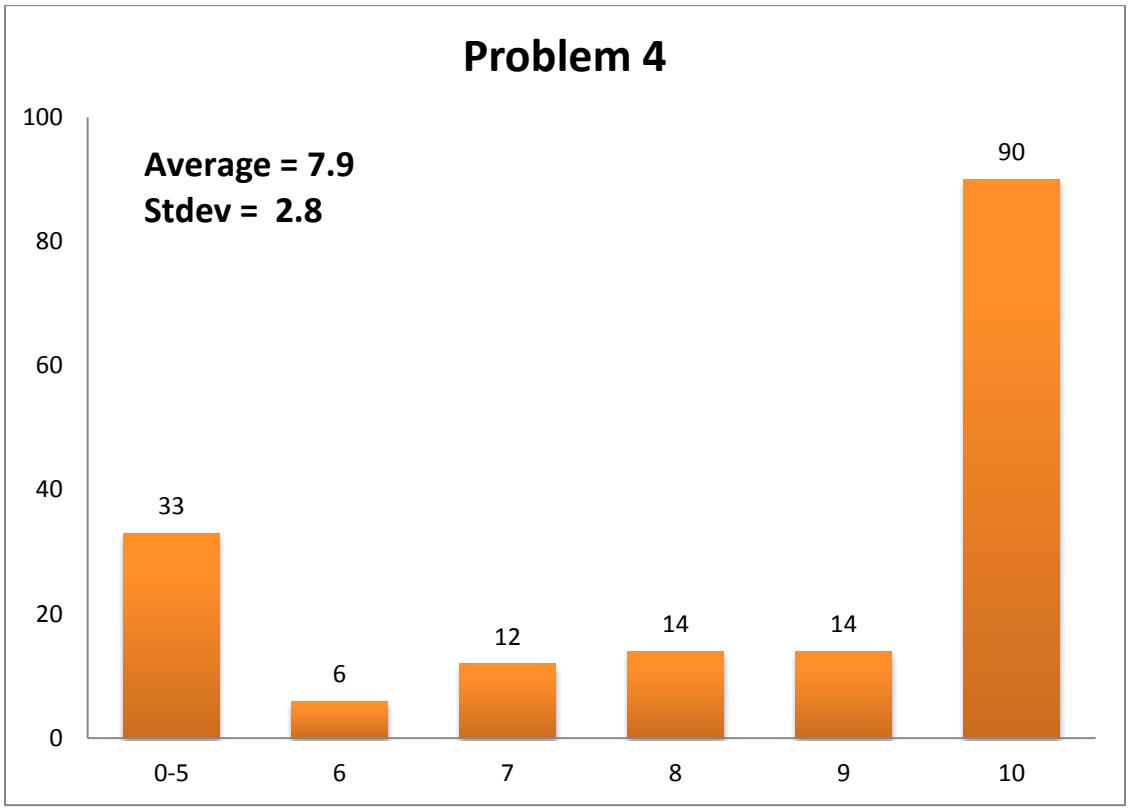


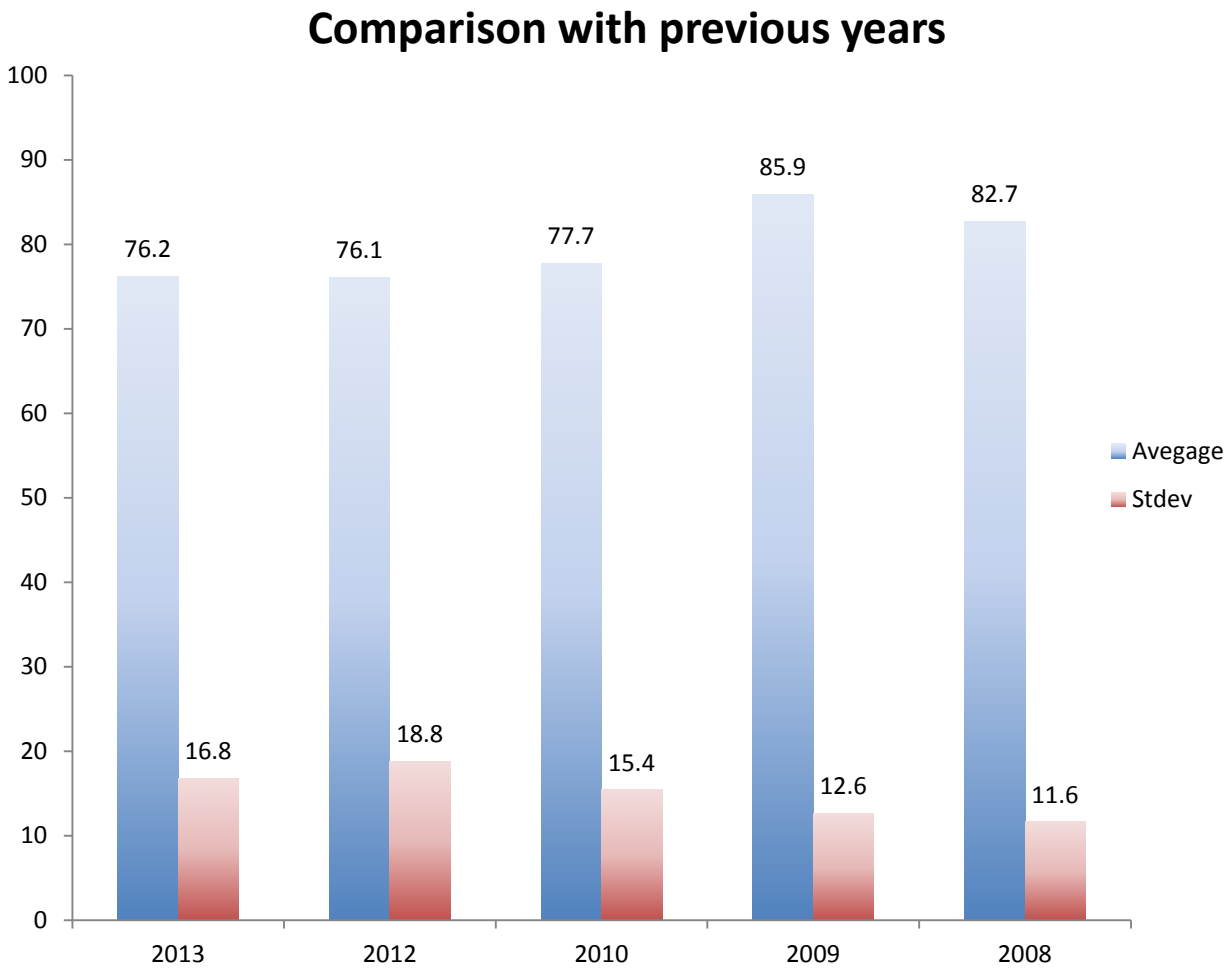
3. Distribution for each problem






Average =5.6
Stdev = 2.9
Problem 3
100
80
60
40
20
0
80
19
17
18
6
29
0-5
6
7
8
9
10


Problem 4
Average = 7.9
Stdev = 2.8
100
80
60
40
20
0
33
6
12
14
14
90
0-5
6
7
8
9
10



4. Common mistakes

1) Problem 1

- Ignoring the momentum term completely in the conservation of momentum equation (They simply took sum of the forces).
- Forgetting the pressure term in the conservation of momentum equation.
- Wrong signs on the terms for the momentum equation.

2) Problem 2

- Incorrect assumptions (i.e. p_1=0, V_1=0, V_2!=0) .

- Not knowing how to calculate Wp (no equation).

3) Problem 3
   - Not knowing what assumptions to make to simplify Navier-Stokes equation.
   - Not knowing what the proper B.C.'s.
   - Not knowing how to do part (b) at all. Not knowing an integral need to be applied now knowing they need to multiply by the area. Many students skipped part (b).
4) Problem 4
   - Using wrong units for the parameters which resulted in wrong pi parameters.
   - Not knowing the correct procedure to solve for the pi parameters.

5. Comments

- The average and standard deviation for the average score over five years is 79.7 and 4.4, respectively. Therefore the average score for 2013 is within the standard deviation over the five years.
- The lowest score was observed for Problem 3 which asked to solve the Navier-Stokes equation.
- Some students included examples in their formula sheet.