Exam 1 Report 10/11/2017

1. Summary

Total number of students	18
Attended	18
Missed	0
Number of problems	3
Average grade	86.53
Standard deviation of grades	11.93

2. Grade distribution



3. Comparison with past years



4. Individual problem breakdown



5. Grade distribution per problem



6. Comments

OVERALL

• All students followed the rules for the formula sheet.

PROBLEM 1

- Many students had the wrong sign when implementing momentum equations.
- Few students made mistakes when calculating the x and y component of the velocities (e.g. used Vsinθ instead of Vcosθ)

PROBLEM 2

- Few students assumed pressure gradient is zero
- Few students did not evaluate the shear stress at wall and simply reported shear stress function.
- Many students did not correctly implement the flowrate equation $Q = \int u \, dA$. Few assumed constant velocity.

PROBLEM 3

- Few students made calculation error when determining the pi parameters.
- Few students assumed $\Delta p = \phi(\pi_1)$ instead of $\pi_1 = \phi(\pi_2)$.