Exam 2 Report 11/8/2023

1. Summary

Total number of students	8
Attended	8
Missed	0
Number of problems	3
Average grade	84.69
Standard deviation of grades	9.82

2. Grade distribution



3. <u>Comparison with past years</u>



4. Individual problem breakdown



5. Grade distribution per problem



6. Comments

PROBLEM 1

- Five students could not obtain the correct velocity profile for the problem.
- Three students applied the wrong boundary conditions on the flow.
- Five students could not solve the linear system for the constants in the velocity field
- Most students applied the correct shear flow formula, but the result was incorrect due to the velocity field being wrong.

PROBLEM 2

- Two student could not get the correct Π_i for the problem.
- Most students obtained the correct Π_i , with minor mistakes in solving the linear systems.
- All students applied the dynamic similarity concept correctly.

PROBLEM 3

- Most students solved the problem correctly.
- One student obtained values for the flow speed that were unreasonably high.
- Most students used the Moody diagram correctly to iterate the friction factor value.
- Six students correctly calculated the modified head pump to 10x the flow rate.