

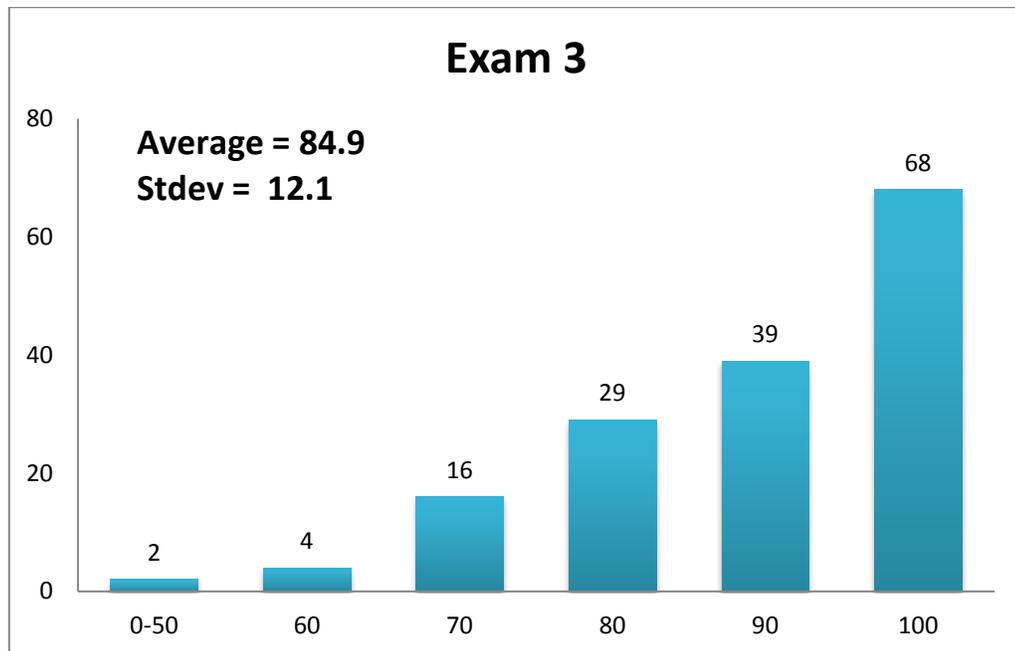
Report of Exam 3

12/16/2016

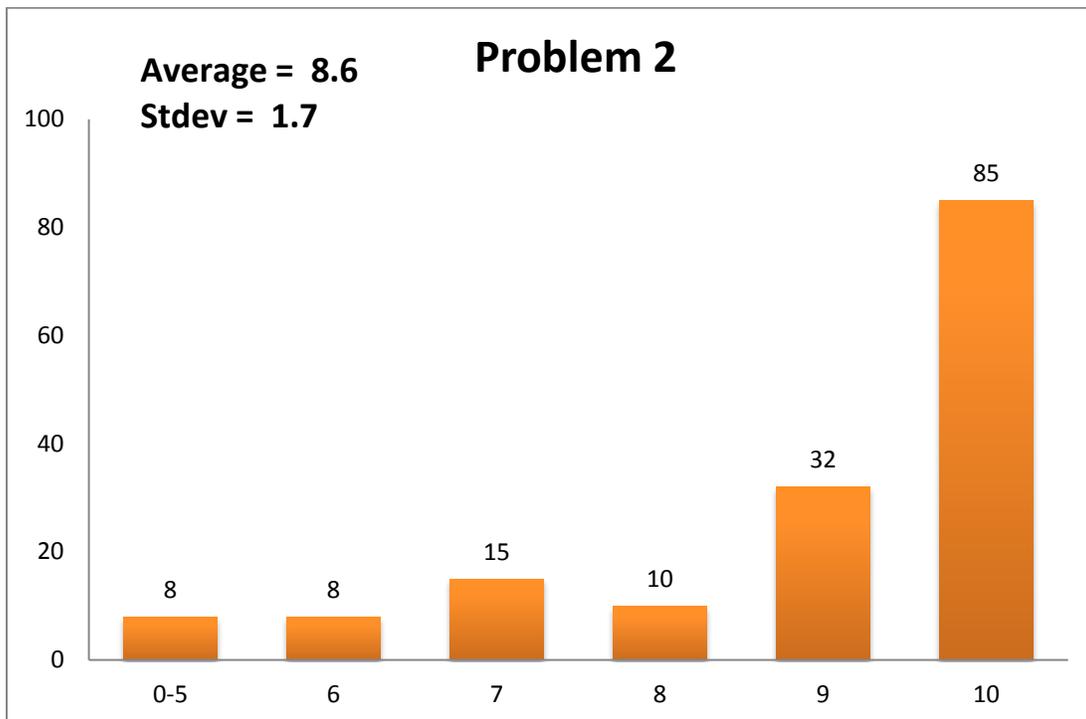
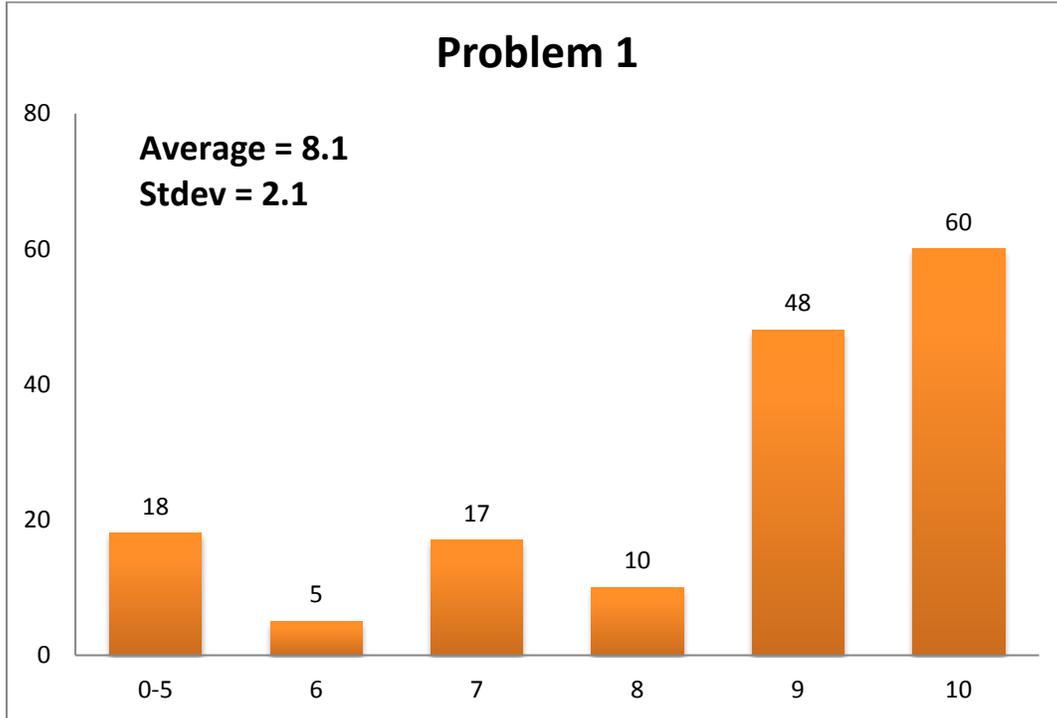
1. Summary

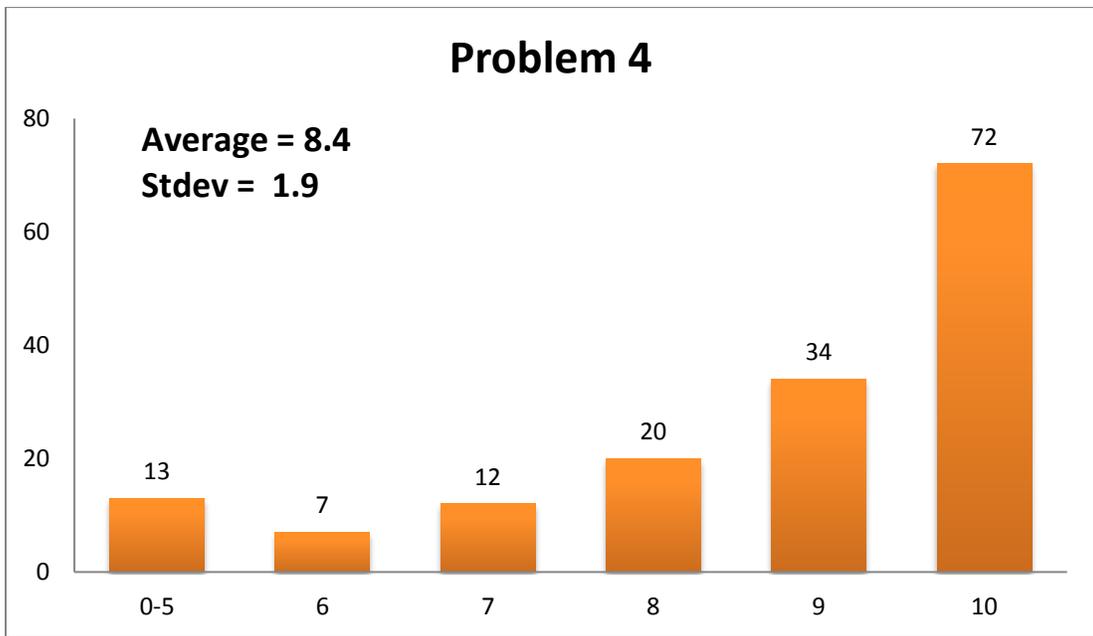
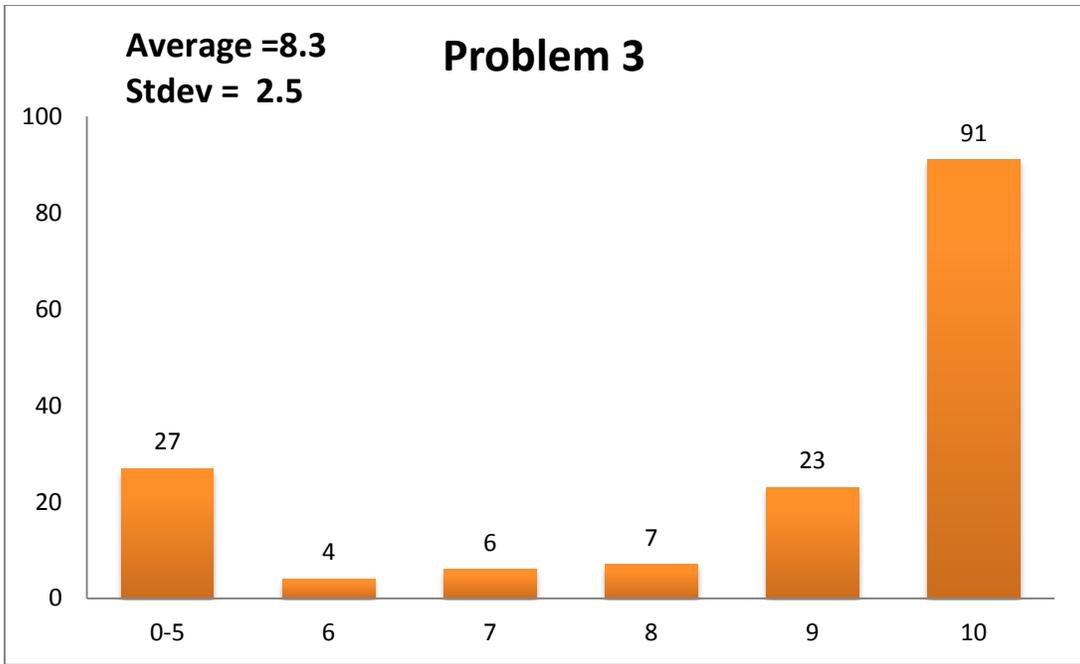
	Number of Students
Total	160
Attended	158
Missed	2
Makeup	0

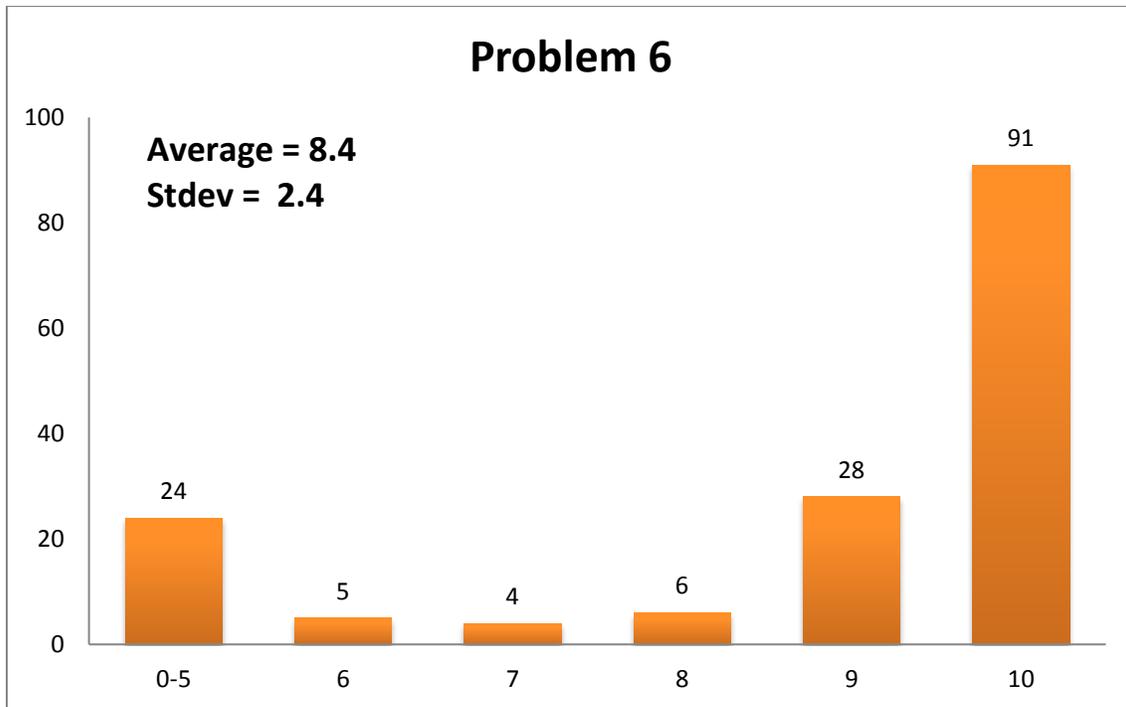
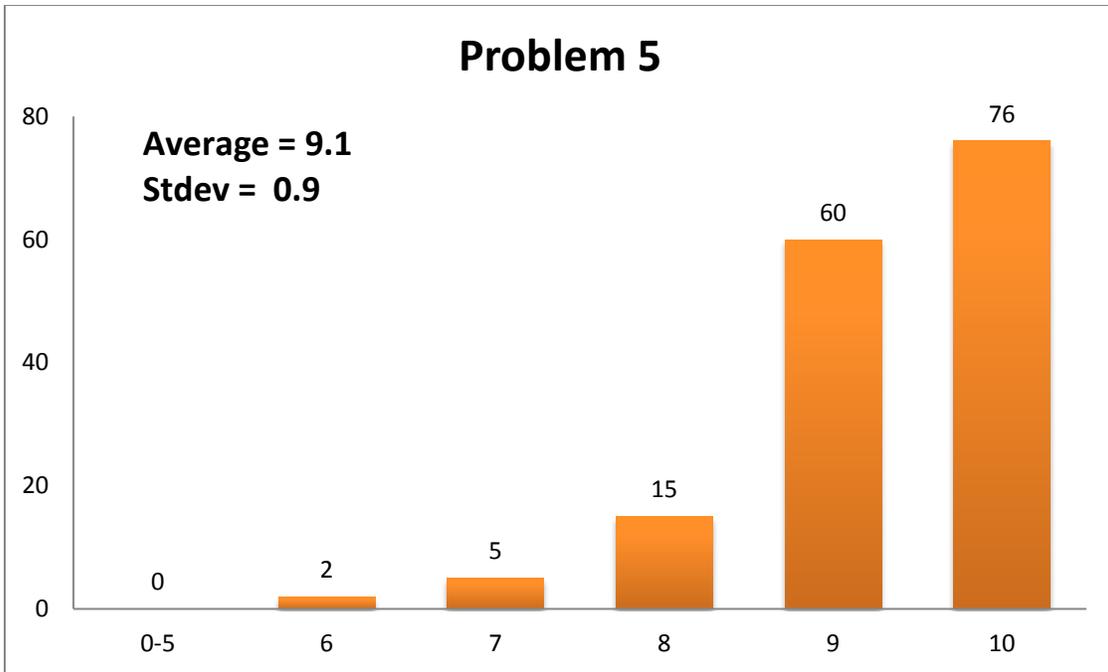
2. Overall distribution



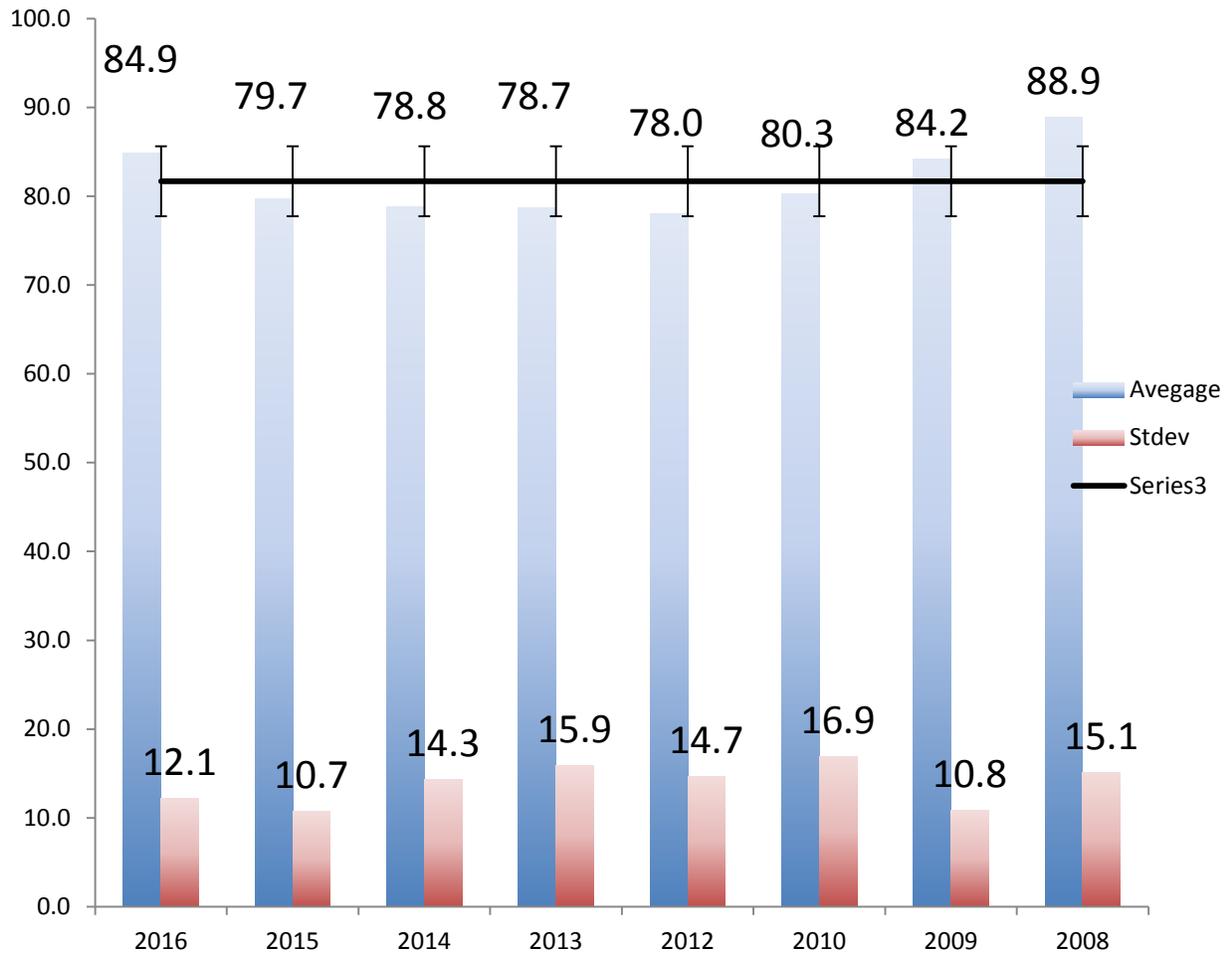
3. Distribution for each problem







Comparison with previous years



4. Common mistakes

Problem 1:

- Using incorrect area for horizontal component of hydrostatic force
- Calculation mistakes when estimating the angle of the resultant force

Problem 2:

- Neglecting pressure force
- Incorrect units for head loss

Problem 3:

- Incorrect units

Problem 4:

- Using wrong length scale for Reynolds number calculation (i.e. pipe length instead of pipe diameter)
- Incorrect calculation of change in elevation

Problem 5:

- Using wrong length scale for Reynolds number calculation (i.e. using pipe width instead of length)
- Not calculating power

Problem 6:

- Not solving for weight force
- Incorrect force equation (i.e. did not have $\text{Weight} = \text{Drag}$)