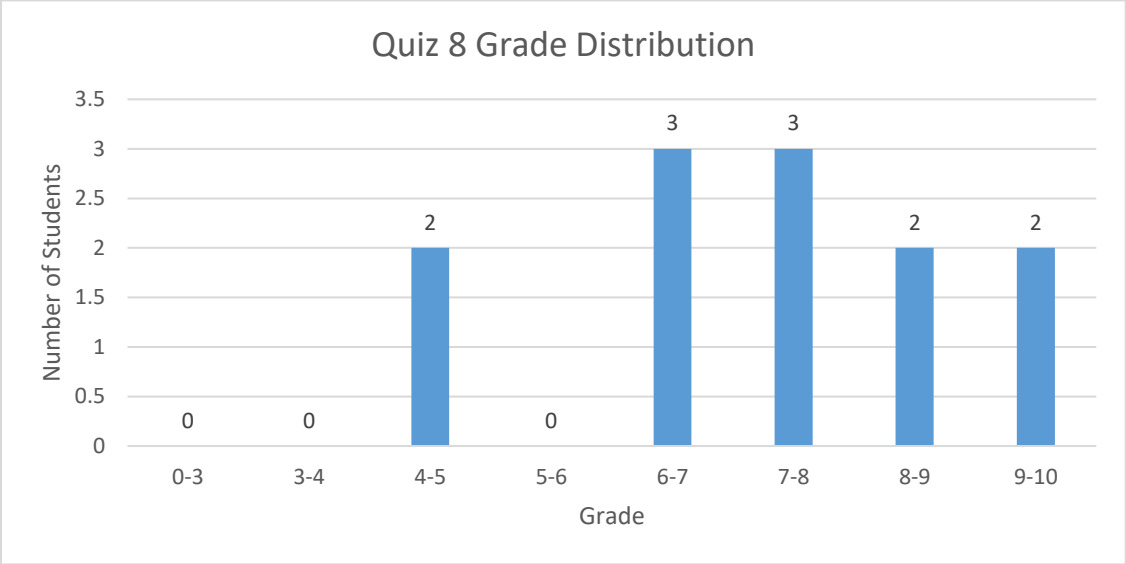
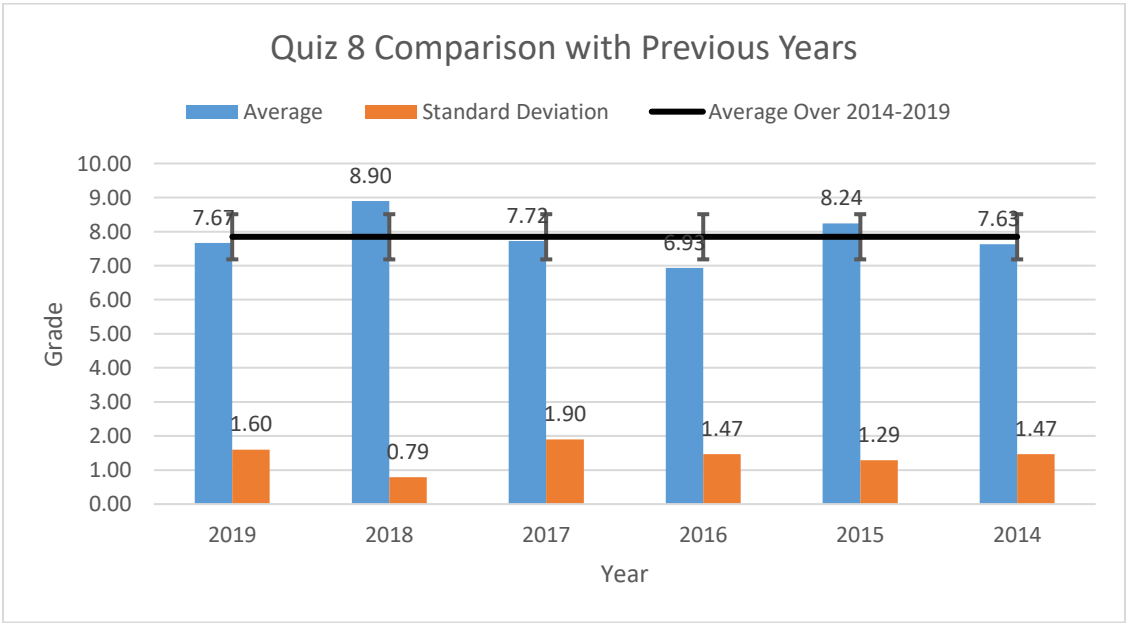
Quiz 8 Report

10/23/2019

1. Summary

Total number of students	14
Attended	12
Missed	2
Average grade	7.67
Standard deviation of grades	1.60





2. Comments

- Many students used wrong boundary condition at $r = b$
  → It should have Negative sign $V_z(b) = -V$
- Some of students couldn't neglect the Pressure gradient term or Gravity term.
- Several students discretized velocity gradient incorrectly/
  Ex) $\frac{\partial}{\partial r}\left(r\frac{\partial V_z}{\partial r}\right) \rightarrow \frac{\partial V_z}{\partial r} + r\frac{\partial^2 V_z}{\partial r^2}$ But several student did $\frac{\partial}{\partial r}\left(r\frac{\partial V_z}{\partial r}\right) \rightarrow r\frac{\partial^2 V_z}{\partial r^2}$
- One student made mistake about Natural log function as shown in below.

$$\frac{1}{\ln(\frac{a}{b})} = \ln(\frac{b}{a}) \quad \rightarrow \text{wrong}$$