

**Math 54**  
**Exam 1, v1, Answers**  
**Fall 2017**

- Problem 1.** Qualitative and Nominal.  
**Problem 2.** They are the same.  
**Problem 3.** Random sample but not a simple random sample.  
**Problem 4.** Observational study.  
**Problem 5.** Nominal.  
**Problem 6.** 2.53.  
**Problem 7.** 3.55.  
**Problem 8.** 12.27.  
**Problem 9.** 3.50.  
**Problem 10.** 39, 71.  
**Problem 11.** 86.  
**Problem 12.** 2.5%.  
**Problem 13.** 0.94.  
**Problem 14.** 0.24.  
**Problem 15.** 9.96.  
**Problem 16.** Below is the relative frequency table.

Weight (kg)	Frequency
0.0 - 3.8	0.27
3.9 - 7.7	0.44
7.8 - 11.6	0.17
11.7 - 15.5	0.11

- Problem 17.** 85.  
**Problem 18.** 16.  
**Problem 19.** 32.  
**Problem 20.** -6, 4, 5.