

**Math 54**  
**Exam 1, v5, Answers**  
**Spring 2018**

- Problem 1.** Quantitative and Ratio.  
**Problem 2.** Equally likely.  
**Problem 3.** Simple random sample.  
**Problem 4.** Observational study.  
**Problem 5.** Ratio.  
**Problem 6.** 2.53.  
**Problem 7.** 3.55.  
**Problem 8.** 12.27.  
**Problem 9.** 3.50.  
**Problem 10.** 50, 66.  
**Problem 11.** 90.  
**Problem 12.** 84%.  
**Problem 13.** 0.65.  
**Problem 14.** 0.26.  
**Problem 15.** 10.24.  
**Problem 16.** Below is the relative frequency table.

Weight (kg)	Frequency
0.0 - 3.8	0.14
3.9 - 7.7	0.43
7.8 - 11.6	0.27
11.7 - 15.5	0.16

- Problem 17.** 85.  
**Problem 18.** 16.  
**Problem 19.** 10.  
**Problem 20.** -6, 4, 5.