

**1.**(1 pt) Determine whether the following examples of data are quantitative or qualitative. Write "QUANTITATIVE" for quantitative and "QUALITATIVE" for qualitative. (without quotations)

(a) The marital status of your coworkers.  
answer: \_\_\_\_\_

(b) Your college GPA.  
answer: \_\_\_\_\_

(c) The occupation of your neighbors.  
answer: \_\_\_\_\_

(d) The amount of bacteria on a piece of moldy bread.  
answer: \_\_\_\_\_

**2.**(1 pt) Determine whether the following examples are discrete or continuous data sets. Write "DISCRETE" for discrete and "CONTINUOUS" for continuous. (without quotations)

(a) The number of errors found on a student's research paper.  
answer: \_\_\_\_\_

(b) The distance traveled by a city bus each day.  
answer: \_\_\_\_\_

(c) The temperature in any given location.  
answer: \_\_\_\_\_

(d) The number of students applying to graduate schools.  
answer: \_\_\_\_\_

**3.**(1 pt) Determine whether the follow descriptions correspond to an observational study or an experiment. Write "EXPERIMENT" for experiment and "OBSERVATION" for observational study. (without quotations)

(a) A new antibiotic is tested in effectiveness by recording how the drug works on patients that already take the drug.  
answer: \_\_\_\_\_

(b) Cartons on milk are opened, and the volumes of the contents are measured.  
answer: \_\_\_\_\_

(c) A new study examines how efficiently athletes burn calories by limiting their diets.  
answer: \_\_\_\_\_

**4.**(1 pt)

Grade on Statistics Exam	Frequency
Below 50	8
50 – 59	7
60 – 69	7
70 – 79	17
80 – 89	10
90 – 100	11

Given the frequency table above, construct the following:

(a) The relative frequency table that corresponds with the above table.

Grade on Statistics Exam	Relative Frequency
Below 50	_____
50 – 59	_____
60 – 69	_____
70 – 79	_____
80 – 89	_____
90 – 100	_____

(b) The cumulative frequency table that corresponds with the above table.

Grade on Statistics Exam	Cumulative Frequency
Below 50	_____
50 – 59	_____
60 – 69	_____
70 – 79	_____
80 – 89	_____
90 – 100	_____

**5.**(1 pt) Complete the table below.

Books read within the past year	Frequency	Relative Frequency
none	1	_____
0 – 4	7	_____
5 – 9	16	_____
10 – 14	_____	0.25
15 – 19	11	_____
20 – 25	4	_____
total	52	1