

PROB STAT HONORS

 Name _____

2.3 – MEASURING POSITION

For each dataset on this page, find Q_1 , Q_3 , and the interquartile range.

1. The number of faculty listed for a variety of private colleges that offer only bachelor's degrees is listed below.

165	221	218	206	138	135	224	204
70	210	207	154	155	82	120	116
176	162	225	214	93	389	77	135
221	161	128	310				

2. The scores of health care quality as calculated by a professional risk management company are listed for selected states.

118.2	114.6	113.1	111.9	110.0	108.8	108.3	107.7	107.0
105.3	103.7	103.2	102.8	101.6	99.8	98.1	96.6	95.7
92.5	91.0	90.0	87.1	83.1	106.7	93.6		

3. The amount of protein (in grams) for a variety of fast-food sandwiches is reported here.

23	30	20	27	44	26	35	20	29	29
25	15	18	27	19	22	12	26	34	15
27	35	26	43	35	14	24	12	23	31
40	35	38	57	22	42	24	21	27	33

4. Certain kinds of tumors tend to recur. The following data represent the lengths of time, in months, for a tumor to recur after chemotherapy.

19	18	17	1	21	22	54	46	25	49
50	1	59	39	43	39	5	9	38	18
14	45	54	59	46	50	29	12	19	36
38	40	43	41	10	50	41	25	19	39
27	20								

5. The following data represent baseball batting averages for a random sample of National League players near the end of the baseball season.

0.194	0.258	0.190	0.291	0.158	0.295	0.261	0.250	0.181
0.125	0.107	0.260	0.309	0.309	0.276	0.287	0.317	0.252
0.215	0.250	0.246	0.260	0.265	0.182	0.113	0.200	

Name _____

For problems 6 and 7, determine the best choice for measures of center and spread. Justify your choice.

20	37	4	20	0	84	14	36	5	331
0	22	3	13	14	36	4	0	18	8
4	0	5	23	19	7	12	8	13	16
13	12	8	42	7	26	0	19	0	21

6. A statistics instructor recorded the number of times each of her students had accessed her web site during the semester.

211	240	255	219	204	200	212	193	187	205
256	203	210	221	249	231	212	236	204	187
201	247	206	187	200	237	227	221	192	196

7. The serum cholesterol (mg/dL) was recorded for a sample of thirty patients.

8. Jordan was reading her test score report, and saw that her score was listed as being in the 85th percentile for that administration of the test. Interpret “85th percentile” in this context.

9. Armand’s parents were told during a well baby check-up that he was in the 60th percentile for height. Interpret “60th percentile” in this context.