

Practice Problems Section 1A

1. The following spreadsheet can be found on the website www.matt-teachout.org. Just click on the “statistics” tab and then “data sets”. This data was taken from bears. Use the bear data to classify each column of data as categorical or quantitative. If the data is quantitative, what are the units? If the data is categorical, indicate how many different options there are in that category.

AGE (months)	Month Data Taken	Gender	Head Length (in)	Head Width (in)	Neck Circum (in)	Length (in)	Chest (in)	Weight (Lbs)
19	July	male	11	5.5	16	53	26	80
55	July	male	16.5	9	28	67.5	45	344
81	September	male	15.5	8	31	72	54	416
115	July	male	17	10	31.5	72	49	348
104	August	female	15.5	6.5	22	62	35	166
100	April	female	13	7	21	70	41	220
56	July	male	15	7.5	26.5	73.5	41	262
51	April	male	13.5	8	27	68.5	49	360
57	September	female	13.5	7	20	64	38	204
53	May	female	12.5	6	18	58	31	144
68	August	male	16	9	29	73	44	332
8	August	male	9	4.5	13	37	19	34
44	August	female	12.5	4.5	10.5	63	32	140
32	August	male	14	5	21.5	67	37	180
20	August	female	11.5	5	17.5	52	29	105
32	August	male	13	8	21.5	59	33	166
45	September	male	13.5	7	24	64	39	204
9	September	female	9	4.5	12	36	19	26
21	September	male	13	6	19	59	30	120
177	September	male	16	9.5	30	72	48	436
57	September	female	12.5	5	19	57.5	32	125
81	September	female	13	5	20	61	33	132
21	September	male	13	5	17	54	28	90
9	September	male	10	4	13	40	23	40
45	September	male	16	6	24	63	42	220
9	September	male	10	4	13.5	43	23	46
33	September	male	13.5	6	22	66.5	34	154
57	September	female	13	5.5	17.5	60.5	31	116
45	September	female	13	6.5	21	60	34.5	182
21	September	male	14.5	5.5	20	61	34	150
10	October	male	9.5	4.5	16	40	26	65
82	October	female	13.5	6.5	28	64	48	356
70	October	female	14.5	6.5	26	65	48	316
10	October	male	11	5	17	49	29	94
10	October	male	11.5	5	17	47	29.5	86
34	October	male	13	7	21	59	35	150
34	October	male	16.5	6.5	27	72	44.5	270
34	October	male	14	5.5	24	65	39	202
58	October	female	13.5	6.5	21.5	63	40	202
58	October	male	15.5	7	28	70.5	50	365
11	November	male	11.5	6	16.5	48	31	79
23	November	male	12	6.5	19	50	38	148
70	October	male	15.5	7	28	76.5	55	446
11	November	female	9	5	15	46	27	62
83	November	female	14.5	7	23	61.5	44	236
35	November	male	13.5	8.5	23	63.5	44	212
16	April	male	10	4	15.5	48	26	60
16	April	male	10	5	15	41	26	64
17	May	male	11.5	5	17	53	30.5	114
17	May	female	11.5	5	15	52.5	28	76
17	May	female	11	4.5	13	46	23	48
8	August	female	10	4.5	10	43.5	24	29
83	November	male	15.5	8	30.5	75	54	514
18	June	male	12.5	8.5	18	57.3	32.8	140



2. The following spreadsheet can be found on the website www.matt-teachout.org. Just click on the “statistics” tab and then “data sets”. This data was taken from various cereals. Use the cereal data to classify each column of data as categorical or quantitative. If the data is quantitative, what are the units? If the data is categorical, indicate how many different options there are in that category.

Name	Manufacturer	Towel (Adult or Child)	Shelf displayed at store	Calories per serving	Carbs (grams per serving)	Fat (grams per serving)	Fiber (grams per serving)	Potassium (milligrams per serving)	Protein (grams per serving)	Sodium (milligrams per serving)	Sugar (grams per serving)	Vitamins (Percent of Daily need per serving)	Consumer Report Magazine Rating	Serving Size (Cups per serving)	Weight (Ounces per serving)
Captain Crunch	Quaker	Child	Middle	110	11	2	0	35	1	220	12	25	19	0.75	1
Cocoa Puffs	General	Child	Middle	110	11	1	0	35	1	180	13	25	23	1	1
Tim	General	Child	Middle	110	13	1	0	25	1	140	12	25	28	1	1
Apple Jacks	Hellogg	Child	Middle	110	11	0	1	30	2	125	14	25	33	1	1
Tom Chex	Falston	Adult	Bottom	110	12	0	0	25	2	280	3	25	41	1	1
Corn Flakes	Hellogg	Adult	Bottom	100	21	0	1	35	2	290	2	25	46	1	1
Nut & Honey	Hellogg	Adult	Middle	110	15	1	0	40	2	190	9	25	30	0.67	1
Snacks	Hellogg	Child	Middle	110	9	1	1	40	2	70	15	25	31	0.75	1
M&M's-Cran	General	Adult	Bottom	100	15	1	2	90	2	220	6	25	40	1	1
Cracklin	Hellogg	Adult	Top	110	10	3	4	180	3	140	7	25	40	0.5	1
Straw-Nuts	Post	Adult	Top	110	17	0	3	90	3	170	3	25	53	0.25	1
Honey Nut	General	Child	Bottom	110	11.5	1	1.5	90	3	250	10	25	31	0.75	1
Nutri-Gran	Hellogg	Adult	Top	140	21	2	3	150	3	220	7	25	41	0.67	1.33
Product-39	Hellogg	Adult	Top	100	10	0	1	45	3	320	3	100	42	1	1
Teat Reason	General	Adult	Top	140	15	1	4	230	3	190	14	100	29	1	1.5
Wheat Chex	Falston	Adult	Bottom	100	17	1	3	115	3	230	3	25	50	0.67	1
Oatmeal	General	Adult	Top	150	13.5	2	1.5	120	3	170	10	25	30	0.5	1.25
Life	Quaker	Child	Middle	100	11	2	2	95	4	150	6	25	45	0.67	1
Whippo	America	Adult	Middle	100	16	1	0	95	4	0	3	25	55	1	1
Quaker Oats	Quaker	Adult	Top	100	14	1	2	110	4	135	6	25	50	0.5	1
Mini's R	Falston	Adult	Top	150	16	3	3	170	4	150	11	25	34	1	1
Quaker Oatmeal	Quaker	Adult	Bottom	100	14	2	2.7	110	5	120	0	0	51	0.67	1
Cherrios	General	Child	Bottom	110	17	2	2	185	6	290	1	25	51	1.25	1
Special K	Hellogg	Adult	Bottom	110	16	0	1	55	6	290	3	25	53	1	1

3. Determine if the each of the following variables are quantitative or categorical.

- The number of milligrams of Aspirin given to heart attack patients.
- The various types of cars being sold at a used car lot.
- Determining if a person smokes marijuana or not.
- The number of bicycles sold at various bicycle stores in Seattle, WA.
- The types of birds observed in Florida.
- The number of grams of gold found in various streams across northern California.
- The various types of cardio classes offered at gyms across Los Angeles, CA.
- The number of cardio classes offered at gyms across Los Angeles, CA.
- The city a person lives in.
- The amount of money in peoples' bank accounts.
- The various zip codes from addresses at a post office.
- The drivers' license numbers from various taxi drivers.
- The number of taxis driven in New York City on various days of the week.

