

1) Classify each of the following as N, nominal; O, ordinal; or I/R, interval/ratio data: Answer

- | | |
|---|------------|
| a. zip code of your local address | Nominal N |
| b. letter grade you will receive in this class | Ordinal O |
| c. country you were born in | Nominal N |
| d. amount of money you have with you | Ratio R |
| e. mileage (miles per gallon) your car gets | Ratio R |
| f. brand of chocolate you prefer | Ordinal O |
| g. year of your birth (A.D.) | Nominal N |
| h. weight of your pet | Ratio R |
| i. degrees earned by your teachers | Ordinal O |
| j. egg sizes (Small, Medium, Large, Extra Large, Jumbo) | Interval I |



2) Which of the following is an example of a continuous variable?

Answer

- | | |
|---|----------------|
| A: Family income | Not continuous |
| B: Number of students in a statistics class | Not continuous |
| C: Zip codes of shoppers | Continuous |
| D: Rankings of baseball teams in a league | Not continuous |

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1) Questions and Answers

1. Which one of the following charts generated from a football statistics spreadsheet could compare the performance of different players?
A. Bar
B. Histogram
C. Pie
D. Scattergram
2. Which chart will show the direction of change in numbers over a period of time by connecting data points?
A. Bar
B. Line
C. Pie
D. Scattergram
3. Which chart can track and compare measurements, such as temperature, and show trends and comparisons?
A. Bar
B. Line
C. Pie
D. Scattergram
4. Which type of chart displays bars side by side?
A. Bar
B. Line
C. Pie
D. Scattergram
5. Which chart generated from spreadsheet data would compare values that represent parts of a whole?
A. Bar
B. Line
C. Pie
D. Scattergram
6. The three types of charts generally used to illustrate spreadsheets are:
A. Bar, line, and scattergram.
B. Line, pie and area.
C. Pie, scattergram, stacked bar.
D. Bar, line, and pie.
7. The best type of chart to compare individual values to each other is:
A. Bar
B. Line
C. Pie
D. Scattergram
8. Bar charts are MOST effectively used to:
A. Present scientific data.
B. Compare groups of data.
C. Show parts of a whole.
D. Show activity of an item over a period of time.
9. The best type of chart to show the relationship of each part to the whole is:
A. Bar
B. Line
C. Pie

D. Scattergram

10. The chart that uses connecting dots to show changes over a period of time is called:

A. Bar

B. Line

C. Pie

D. Scattergram

2) Attempt this online Quiz

https://www.quia.com/quiz/760453.html?AP_rand=1065922549

3) Interpret charts using this quiz

<http://downloads.bbc.co.uk/skillswise/maths/ma37grap/quiz/ma37grap-l1-quiz.pdf>

iance of the team from year to year?

Answer

c

b

a

d

c

c

a

b

c

d

FEV=Forced Expiratory Volume, in liters, is a primary indicator of lung function.

FEV measures the volume of air that can be blown out of the lungs in the first second after full inspir

Height in inches

Gender = 0 for girl; Gender = 1 for boys

Smokers = 1, Non smokers = 0

Which 21

Hint : Use

CORREL(/

age	FEV	height	gender	smoke
9	1.708	57	0	0
8	1.724	67.5	0	0
7	1.72	54.5	0	0
9	1.558	53	1	0
9	1.895	57	1	0
8	2.336	61	0	0
6	1.919	58	0	0
6	1.415	56	0	0
8	1.987	58.5	0	0
9	1.942	60	0	0
6	1.602	53	0	0
8	1.735	54	1	0
8	2.193	58.5	0	0
8	2.118	60.5	1	0
8	2.258	58	1	0
7	1.932	53	1	0
5	1.472	50	1	0
6	1.878	53	0	0
9	2.352	59	1	0
9	2.604	61.5	1	0
5	1.4	49	0	0
5	1.256	52.5	0	0
4	0.839	48	0	0
7	2.578	62.5	1	0
9	2.988	65	0	0
3	1.404	51.5	1	0
9	2.348	60	1	0
5	1.755	52	1	0
8	2.98	60	0	0
9	2.1	60	0	0
5	1.282	49	0	0
9	3	65.5	1	0
8	2.673	60	0	0
7	2.093	57.5	0	0
5	1.612	52	0	0
8	2.175	59	0	0
9	2.725	59	1	0

8	2.071	55	1	0
8	1.547	57	1	0
8	2.004	57	1	0
9	3.135	60	0	0
8	2.42	59	1	0
5	1.776	51	1	0
8	1.931	57	0	0
5	1.343	50	0	0
9	2.076	57	0	0
7	1.624	54	1	0
8	1.344	52.5	0	0
6	1.65	55	1	0
8	2.732	60.5	1	0
5	2.017	54.5	1	0
9	2.797	61.5	0	0
9	3.556	62	1	0
8	1.703	54.5	1	0
6	1.634	54	1	0
9	2.57	57	1	0
9	3.016	62.5	0	0
7	2.419	60	0	0
4	1.569	50	0	0
8	1.698	57.5	0	0
8	2.123	60	1	0
8	2.481	60	0	0
6	1.481	51	0	0
4	1.577	49	0	0
8	1.94	59	1	0
6	1.747	57.5	1	0
9	2.069	58	1	0
7	1.631	55.5	0	0
5	1.536	52	0	0
9	2.56	60.5	0	0
8	1.962	57	1	0
8	2.531	58	0	0
9	2.715	60	1	0
9	2.457	59	1	0
9	2.09	59.5	1	0
7	1.789	56	1	0
5	1.858	53	1	0
5	1.452	51	1	0
9	3.842	69	1	0
6	1.719	53	0	0
7	2.111	57	0	0
6	1.695	53	0	0

8	2.211	63	1	0
8	1.794	54.5	1	0
7	1.917	58	0	0
8	2.144	63	0	0
7	1.253	52	1	0
9	2.659	61.5	1	0
5	1.58	52.5	1	0
9	2.126	62	1	0
9	3.029	61.5	0	0
9	2.964	64.5	1	0
7	1.611	57.5	1	0
8	2.215	60	0	0
8	2.388	60	0	0
9	2.196	61	1	0
9	1.751	58	1	0
9	2.165	61.5	1	0
7	1.682	55	1	0
8	1.523	55	1	0
8	1.292	52	0	0
7	1.649	54	1	0
9	2.588	63	1	0
4	0.796	47	1	0
9	2.574	60.5	0	0
6	1.979	56	1	0
8	2.354	58.5	1	0
6	1.718	55	1	0
7	1.742	58.5	0	0
7	1.603	51	0	0
8	2.639	59.5	0	0
7	1.829	54	0	0
7	2.084	58	1	0
7	2.22	58	1	0
7	1.473	52.5	0	0
8	2.341	60.5	0	0
7	1.698	54.5	0	0
5	1.196	46.5	0	0
8	1.872	56.5	0	0
7	2.219	55	1	0
9	2.42	57	1	0
7	1.827	54.5	0	0
7	1.461	54	0	0
6	1.338	53	1	0
8	2.09	57	1	0
8	1.697	59	0	0
8	1.562	55	1	0

9	2.04	55.5	0	0
7	1.609	51.5	0	0
8	2.458	61	0	0
9	2.65	63.5	1	0
8	1.429	57.5	1	0
8	1.675	53	1	0
9	1.947	56.5	0	0
8	2.069	54	1	0
6	1.572	52	1	0
6	1.348	53	1	0
8	2.288	61.5	0	0
9	1.773	58.5	1	0
5	0.791	52	0	0
7	1.905	58	1	0
9	2.463	61	0	0
6	1.431	51	1	0
9	2.631	62	0	0
9	3.114	64.5	1	0
9	2.135	58.5	1	0
6	1.527	52.5	1	0
8	2.293	58	0	0
9	3.042	66	0	0
8	2.927	63.5	1	0
8	2.665	64	0	0
9	2.301	58.5	1	0
9	2.46	64	1	0
9	2.592	60.5	0	0
7	1.75	55	0	0
8	1.759	53	1	0
6	1.536	48	1	0
9	2.259	58.5	0	0
9	2.048	64.5	0	0
9	2.571	60.5	1	0
7	2.046	56	1	0
8	1.78	58.5	0	0
5	1.552	54	0	0
8	1.953	58	0	0
9	2.893	64.5	1	0
6	1.713	50.5	1	0
9	2.851	60	0	0
6	1.624	51.5	1	0
8	2.631	59	1	0
5	1.819	53	1	0
7	1.658	53	1	0
7	2.158	53.5	1	0

4	1.789	52	1	0
9	3.004	64	0	0
8	2.503	63	1	0
9	1.933	58	0	0
9	2.091	58.5	0	0
9	2.316	59.5	0	0
5	1.704	51	0	0
9	1.606	57.5	0	0
7	1.165	47	1	0
6	2.102	55.5	0	0
9	2.32	57	0	0
9	2.23	61	1	0
9	1.716	55.5	1	0
7	1.79	53.5	1	0
5	1.146	50	0	0
8	2.187	61.5	0	0
9	2.717	61.5	1	0
7	1.796	55	1	0
9	1.953	58	1	1
8	1.335	56.5	0	0
9	2.119	57	1	0
6	1.666	52	1	0
6	1.826	52.5	1	0
8	2.709	62.5	0	0
9	2.871	65	1	0
5	1.092	50	0	0
6	2.262	57.5	1	0
6	2.104	56.5	1	0
9	2.166	57.5	0	0
7	1.69	54	0	0
9	2.973	59.5	1	0
8	2.145	59.5	0	0
5	1.971	58	1	0
7	2.095	57	0	0
6	1.697	55	0	0
9	2.455	60	0	0
7	1.92	56.5	1	0
9	2.164	60	1	0
9	2.13	59	0	0
8	2.993	63	0	0
9	2.529	59	0	0
7	1.726	53	0	0
9	2.442	61.5	0	0
4	1.102	48	0	0
9	2.056	63	0	0

5	1.808	55.5	1	0
8	2.305	64.5	0	0
9	1.969	59	0	0
8	1.556	58.5	0	0
3	1.072	46	0	0
9	2.042	62	1	0
8	1.512	53	0	0
6	1.423	49.5	1	0
9	3.681	68	1	0
8	1.991	59.5	1	0
8	1.897	55.5	1	0
7	1.37	55	0	0
6	1.338	51.5	0	0
8	2.016	56	1	0
9	2.639	63	0	0
4	1.389	48	0	0
7	1.612	56.5	1	0
8	2.135	59	0	0
8	2.681	60.5	1	0
9	3.223	65	0	0
6	1.796	55	0	0
8	2.01	55	1	0
6	1.523	51	0	0
8	1.744	52.5	1	0
9	2.485	64	0	0
8	2.335	59	0	0
7	1.415	53.5	0	0
9	2.076	60.5	1	0
8	2.435	59.5	1	0
7	1.728	56.5	0	0
9	2.85	63	0	0
8	1.844	56.5	0	0
9	1.754	61.5	0	0
6	1.343	52	0	0
8	2.303	57	1	0
9	2.246	63.5	1	0
8	2.476	63	0	0
9	3.239	65	1	0
9	2.457	61.5	1	0
8	2.382	62	0	0
7	1.64	55	0	0
5	1.589	51	0	0
7	2.056	54	1	0
8	2.226	57	1	0
9	1.886	56	0	0

9	2.833	61.5	1	0
6	1.715	53	1	0
8	2.631	59	1	0
7	2.55	56	1	0
9	1.912	59	0	0
7	1.877	52.5	0	0
7	1.935	52.5	0	0
5	1.539	50	0	0
9	2.803	59.5	1	0
9	2.923	64	1	0
8	2.358	61	0	0
8	2.094	57.5	1	0
9	1.855	60	1	0
6	1.535	55	0	0
7	2.135	56	1	0
5	1.93	51	1	0
9	2.182	59.5	0	0
5	1.359	50.5	1	0
7	2.002	57.5	0	0
6	1.699	54	1	0
8	2.5	57	1	0
7	2.366	58	0	0
8	2.069	60	0	0
4	1.418	49	0	0
8	2.333	57	0	0
5	1.514	52	1	0
8	1.758	52	0	0
7	2.535	59.5	1	0
7	2.564	58	0	0
9	2.487	64	0	0
9	1.591	57	0	0
8	1.624	53	1	0
9	2.798	62	1	0
6	1.691	53	1	0
8	1.999	56.5	0	0
9	1.869	57	1	0
4	1.004	48	1	0
6	1.427	49.5	1	0
7	1.826	51	1	0
9	2.688	59.5	0	0
8	1.657	56	1	0
6	1.672	54	0	0
8	2.015	57.5	0	0
7	2.371	55.5	0	0
5	2.115	50	1	0

8	2.328	60	0	0
7	1.495	57	0	0
11	2.884	69	1	0
10	2.328	64	1	0
14	3.381	63	1	0
11	2.17	58	0	0
11	3.47	66.5	1	0
12	3.058	60.5	0	0
10	1.811	57	1	0
11	2.524	64	1	0
10	2.642	61	0	0
14	3.741	68.5	1	0
13	4.336	69.5	1	0
14	4.842	72	1	0
12	4.55	71	1	0
12	2.841	63	0	0
10	3.166	61.5	0	0
13	3.816	63.5	0	0
10	2.561	62	1	0
11	3.654	65	0	0
10	2.481	61	1	0
11	2.665	63	0	0
10	3.203	66	1	0
13	3.549	68	1	0
14	2.236	66	0	1
11	3.222	72	1	0
10	3.111	66	1	0
11	3.49	67	0	0
13	3.147	64	0	0
10	2.52	60.5	0	0
10	2.292	63	1	0
12	2.889	64	0	0
10	2.246	60.5	1	0
10	1.937	62	1	0
10	2.646	60	1	0
11	2.957	64.5	1	0
11	4.007	67	1	0
11	2.386	61.5	0	0
10	3.251	66	1	0
11	2.762	60	0	0
11	3.011	64	0	0
13	4.305	68.5	1	0
13	3.906	67	1	0
11	3.583	67	1	0
11	3.236	66	0	0

14	3.436	62.5	1	0
11	3.058	61	1	0
10	3.007	62	1	0
10	3.489	66.5	1	0
10	2.864	60	0	0
14	3.428	64	0	1
13	2.819	62	0	0
10	2.25	58	0	0
14	4.683	68.5	1	0
10	2.352	61.5	1	0
11	3.108	64.5	1	0
13	3.994	67	1	0
12	4.393	68.5	1	0
13	3.208	61	0	1
10	2.592	65	1	0
13	3.193	70	1	0
11	1.694	60	1	1
14	3.957	72	1	1
11	2.346	59	0	0
13	4.789	69	1	1
11	3.515	67.5	1	0
11	2.754	65.5	0	0
10	2.72	65.5	1	0
11	2.463	64.5	1	0
11	2.633	62	0	0
10	3.048	65.5	0	0
11	3.111	67.5	1	0
13	3.745	68	0	0
12	2.384	63.5	0	1
10	2.094	58.5	1	0
10	3.183	65.5	0	0
14	3.074	65	0	1
11	3.977	70.5	1	0
10	3.354	63	1	0
11	3.411	63.5	0	0
10	2.387	66	0	1
11	3.171	63	0	0
13	3.887	67.5	1	0
13	2.646	61.5	0	0
10	2.504	60	0	0
11	3.587	64.5	1	0
11	3.845	68.5	1	0
12	2.971	64.5	1	0
10	2.891	61	0	0
10	1.823	57	0	0

11	2.417	62.5	1	0
10	2.175	58	0	0
11	2.735	62.5	0	0
14	4.273	72.5	1	0
13	2.976	65.5	1	0
12	3.835	69.5	0	1
11	4.065	66.5	1	0
11	2.318	59	0	0
11	3.596	68	1	0
14	3.395	67	0	0
12	2.751	63	0	0
10	2.673	64.5	0	0
12	2.556	62	0	0
11	2.542	62	0	0
10	2.608	66	1	0
11	2.354	62	0	0
13	2.599	62.5	0	1
10	1.458	57	0	0
10	3.795	68.5	1	0
11	2.491	59	0	0
13	3.06	61.5	0	0
10	2.545	65	1	0
11	2.993	66.5	1	0
10	3.305	65	0	0
13	4.756	68	1	1
11	3.774	67	0	0
10	2.855	64.5	1	0
11	2.988	70	1	0
11	2.498	60	1	0
14	3.169	64	0	0
11	2.887	62.5	1	0
13	2.704	61	0	0
11	3.515	64	0	0
11	3.425	65.5	1	0
10	2.287	61	0	0
13	2.434	65.4	0	0
10	2.365	63.5	0	0
13	3.086	67.5	0	1
10	2.696	66	1	0
12	2.868	62	0	0
10	2.813	61.5	0	0
14	4.309	69	1	1
12	3.255	66	0	0
10	3.413	66	0	1
11	4.593	69	1	0

14	4.111	71	1	0
12	1.916	60.5	1	0
10	1.858	58	1	0
10	2.975	63	0	1
10	3.35	69	1	0
10	2.901	59.5	1	0
12	2.241	64	1	0
13	4.225	74	1	0
11	3.223	64.5	0	0
12	5.224	70	1	0
11	4.073	67	1	0
12	4.08	64.5	1	0
11	2.606	65	0	0
11	3.169	62.5	0	1
12	4.411	68	1	0
12	3.791	68.5	1	0
13	3.089	67.5	1	0
11	2.465	60	1	0
12	3.343	68	1	1
10	3.2	65	1	0
12	2.913	64	1	0
13	4.877	73	1	0
10	2.358	59	0	0
12	3.279	70.5	1	0
10	2.581	66	1	0
12	2.347	61.5	0	0
10	2.691	67	0	0
11	2.827	62.5	0	0
10	1.873	52.5	1	0
12	3.751	72	1	1
14	2.538	71	0	0
10	2.758	65.5	1	0
10	3.05	60	0	0
12	3.079	60	0	0
10	2.201	60.5	1	0
10	1.858	59	1	0
13	2.216	68	0	1
12	3.403	62	0	0
12	3.501	64.5	0	0
11	2.578	63	0	0
13	3.078	66	0	1
12	3.186	67	0	1
10	1.665	57	1	0
11	2.081	63	0	0
11	2.974	62	0	0

13	3.297	65	0	1
12	4.073	68.5	1	0
13	4.448	69	1	0
13	3.984	71	1	0
10	2.25	58	0	0
12	2.752	63.5	0	0
12	2.304	66.5	1	1
14	3.68	67	1	0
11	3.102	64	0	1
10	2.862	61	0	0
13	2.677	67	0	1
11	3.023	67.5	0	0
11	3.681	68	0	0
13	3.255	66.5	0	0
12	3.692	67	1	0
10	2.356	60.5	0	0
10	4.591	70	1	0
12	3.082	63.5	0	0
13	3.297	65	0	1
11	3.258	63	0	0
10	2.216	61	1	0
11	3.247	65.5	1	0
11	4.324	67.5	1	0
11	2.362	61	0	0
11	2.563	63	0	0
11	3.206	63.5	1	0
14	3.585	70	1	0
12	4.72	71.5	1	0
13	3.331	65.5	0	0
13	5.083	74	1	0
10	3.498	68	1	1
12	2.417	61	0	0
10	2.364	61	1	0
10	2.341	61	1	0
12	2.759	61.5	0	1
11	2.953	67	0	1
12	3.231	63	1	0
11	3.078	67.5	1	0
11	3.369	70.5	1	0
12	3.529	70.5	1	0
12	2.866	62	0	0
14	2.891	62	0	0
11	3.022	61.5	0	0
10	3.127	62	1	0
11	2.866	60.5	0	0

12	2.605	62.5	0	0
13	3.056	63	0	0
12	2.569	63	0	0
11	2.501	62	0	0
11	3.32	65.5	1	0
11	2.123	65	1	0
14	3.78	70	1	0
11	3.847	66	1	0
13	3.785	63	0	1
12	3.924	68	1	0
10	2.132	59	1	0
12	2.752	68.5	1	0
13	2.449	63	0	0
10	3.456	63	1	0
10	3.073	66	0	0
10	2.688	62	0	0
10	3.329	68	1	0
14	4.271	72.5	1	0
12	3.53	64	1	0
11	2.928	65.5	1	0
11	2.689	61.5	0	0
12	2.332	57	1	0
14	2.934	64	0	0
14	2.276	66	1	1
10	3.11	64.5	1	0
11	2.894	67	1	0
11	4.637	72	1	1
10	2.435	65	0	0
10	2.838	63	0	0
12	3.035	62	0	0
12	4.831	71	1	0
11	2.812	61	1	0
12	2.714	65.5	0	0
10	3.086	62	0	0
12	3.519	65.5	0	0
13	4.232	70.5	1	0
10	2.77	62	1	0
12	3.341	65.5	0	0
10	3.09	65	1	0
13	2.531	61	1	0
12	2.822	69.5	1	0
10	3.038	65	0	1
12	2.935	65.5	1	0
10	2.568	63.5	0	0
11	2.387	60.5	1	0

12	2.499	65	1	0
11	4.13	67	1	0
12	3.001	63.5	0	0
10	3.132	59.5	0	0
13	3.577	63.5	0	0
12	3.222	61	0	0
11	3.28	66	1	0
11	2.659	64	1	0
11	2.822	62	0	0
11	2.14	60.5	0	0
12	4.203	71	1	0
14	2.997	64.5	0	0
11	3.12	61	0	1
11	2.562	62.5	0	0
12	3.082	64.5	0	0
14	3.806	68	1	0
11	3.339	68.5	1	1
13	3.152	62	0	1
11	2.458	60	0	0
10	2.391	59.5	1	0
13	3.141	61	0	0
12	2.579	63	0	0
11	3.104	67.5	0	1
13	4.045	69	1	1
14	4.763	68	1	1
10	2.1	58	1	0
11	3.069	65	0	1
11	2.785	69	1	0
15	4.284	70	1	0
15	4.506	71	1	1
18	2.906	66	0	0
19	5.102	72	1	0
19	3.519	66	0	1
16	3.688	68	1	1
17	4.429	70	1	0
15	4.279	67.5	1	0
15	4.5	70	1	0
15	2.635	64	0	0
15	2.679	66	0	1
15	2.198	62	0	1
19	3.345	65.5	0	1
18	3.082	64.5	0	0
16	3.387	66.5	0	0
17	3.082	67	1	1
16	2.903	63	0	1

15	3.004	64	0	1
15	5.793	69	1	0
15	3.985	71	1	0
18	4.22	68	1	0
17	4.724	70.5	1	0
15	3.731	67	1	0
17	3.406	69	1	1
17	3.5	62	0	0
16	3.674	67.5	0	0
17	5.633	73	1	0
15	3.122	64	0	1
15	3.33	68.5	0	1
16	2.608	62	0	1
16	3.645	73.5	1	0
15	3.799	66.5	1	1
18	4.086	67	1	1
15	2.887	63	0	0
16	4.07	69.5	1	1
17	3.96	70	1	0
16	4.299	66	1	0
16	2.981	66	0	0
15	2.264	63	0	1
18	4.404	70.5	1	1
15	2.278	60	0	1
16	4.504	72	1	0
17	5.638	70	1	0
16	4.872	72	1	1
16	4.27	67	1	1
15	3.727	68	1	1
18	2.853	60	0	0
16	2.795	63	0	1
15	3.211	66.5	0	0

iration.

factors are most related to FEV? Explain the relationship

Correlation Matrix option in Data Analysisi tab

\8:A661,B8:B661)

