

# Week 5

LATEST SUBMISSION GRADE

85.71%

1. Which of the following datasets is best suited to a stacked bar chart?

1 / 1 point

- ☐ The amount of fish caught from Lake Erie in metric tonnes each year, over the last 2 decades.
- ☒ Number Belgian households that have 0, 1, 2, etc. pets of a given species (cats, dogs, birds, etc.), calculated as a percentage of total households in each province of Belgium.
- ☐ The populations of each major city of Japan, as at December 2018.
- ☐ Number of deaths in Denmark each year, over the past 15 years.

**Correct**

Correct.

2. Which of the following datasets is best suited to a bullet graph?

1 / 1 point

- ☒ The weights of each animal in Wellington Zoo, benchmarked against an “optimal” healthy weight as well as a healthy weight range.
- ☐ Spending amounts of individual customers in Centralworld (the largest shopping mall in Thailand), by age group and gender.
- ☐ The list of vehicles driving on the Autobahnen in Germany on a given day, by vehicle class (e.g. motorcycle, car, light truck, etc.).
- ☐ The budget allocation for a new skyscraper in New York.

**Correct**

Correct. The healthy weight range could be indicated by the background colours, and the optimal weight could be indicated by the marker.

3. Imagine that you run a sporting goods store, and that you have a dataset of all text-based

0 / 1 point

Tweets (from Twitter) over the past 2 months. Which of the following would be an example of valuable information (for your business) that we could extract from this data?

- ☒ Current global politics.

- ☐ The list of celebrities currently on the latest fad diet.
- ☐ The recreational sports are currently popular.
- ☐ All of the above.

**Incorrect**

Incorrect. This would be unlikely to have any direct impacts on your business.

4. Why has social media data become so important in recent years?

**1 / 1 point**

- ☐ Its widespread use means unprecedented amounts of data is being generated.
- ☐ Users post a lot of data that they would not otherwise publicise.
- ☐ Tracking current trends can allow the prediction of the next trend.
- ☒ All of the above.

**Correct**

Correct. All of the above are valid reasons behind social media data becoming important.

5. In Practice Task 1 this week, our analysis was restricted to university students. Imagine that we performed a similar analysis on other demographics, and put the resulting Pareto charts in a dashboard. How could we use the resulting dashboard?

**1 / 1 point**

- ☐ If Instagram and Facebook were the most popular amongst all demographics, then they might be good avenues to use for a marketing campaign.
- ☐ If the responses varied significantly across different demographics, it could give us vital information about the different demographics themselves.
- ☐ If we were (say) Snapchat, we could gain insight into our popularity amongst the different demographics.
- ☒ All of the above.

**Correct**

Correct. The above are all valid uses of the dashboard.

6. In Practice Task 2 this week, we created a dashboard containing plots involving greenhouse gas emission data. Assume that all countries have set comparable emissions targets to Australia. Just from these plots alone, which of the following conclusions might we be able to

**1 / 1 point**

draw that we couldn't have drawn from either of the individual graphs?

- ☐ There is no benefit in making a dashboard out of these two graphs.
- ☒ Canada, the USA and New Zealand would be unlikely to make their emission targets.
- ☐ Russia will make its emissions target.
- ☐ Northern Europe is performing better than Australia.

✓ **Correct**

Correct. Since Canada, the USA and New Zealand are performing worse than Australia and Australia is unlikely to meet its target, then we can reasonably conclude that the other 3 countries are even less likely to meet their targets. We could not make this conclusion from either graph by itself.

7. One of the examples provided to you was the set of hospital dashboards provided by the South Australia Health. Which of the following is/are valid uses for these dashboards?

1 / 1 point

- ☐ It allows emergency dispatch to see which hospitals have room to accommodate different types of injuries (burn ward, intensive care unit, etc.), so they can better direct ambulances.
- ☐ Being able to see whether one hospital has an excess number of patients waiting for a particular type of surgery would allow better reallocation of the available doctors.
- ☐ Having up-to-date records of the number of inpatients at each hospital against the capacity of each hospital would allow better coordination of patient transfer.
- ☒ All of the above.

✓ **Correct**

Correct. Each of the above is a valid use of the dashboards.