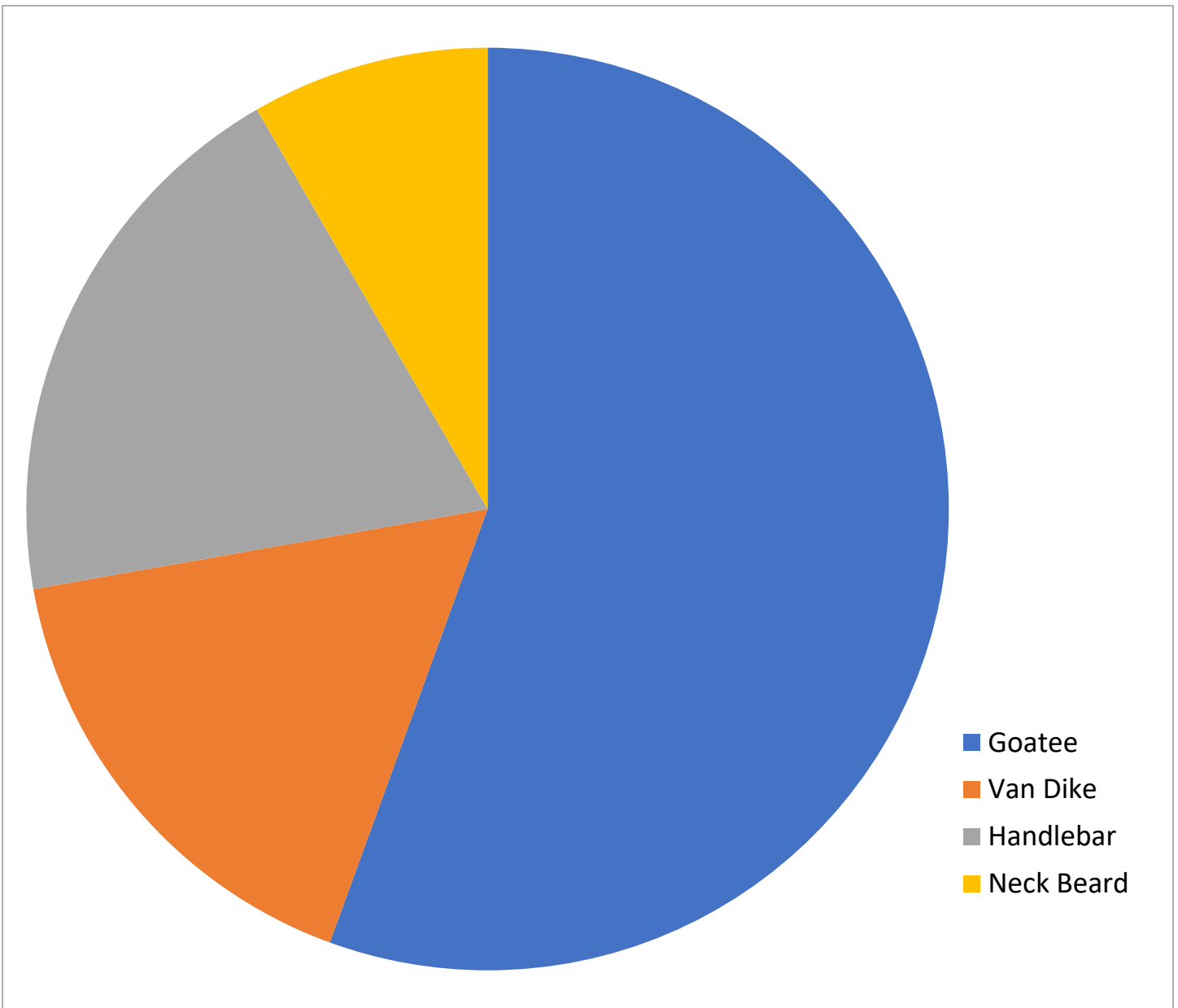


Data Handling Revision

1) Draw a pie chart for

Favourite Breed	Frequency
Retriever	13
Alsatian	2
Labrador	5
Staffy	4
Huskey	6

2) 72 people were asked their favourite type of facial hair, the results are given in a pie chart. Find out how many people voted for each.



3) Find the mean, median, mode and range for:

- a) 2,9,2,5,4
- b) 5,7,2,5,7
- c) 1,6,2,0,5,4

4) State if this data is qualitative or quantitative, if it is quantitative, state if it is discrete or continuous.

- a) Number of siblings
- b) Colour of car
- c) Length of my index finger
- d) Someone's age
- e) Mass of an egg

5) Which type of average would you use for this data and why?

- a) red, red, orange, blue, red
- b) 1,2,3,4,1000

6) The times of two 100m runners are recorded and the mean and range are calculated;

Becky: mean = 11.7s range = 2.3s

Amelia: mean = 12.0s range = 0.7s

Compare the times that they run 100m in.

7) 8 teenagers were monitored for how many hours they spent on social media each week and then took a maths test. The results are given below:

Weekly hours on social media	15	9	19	26	28	29	31	35
Maths score	86	84	45	55	25	13	31	19

- a) Plot a scatter graph with hours on the x axis and score on the y axis
- b) Why did we put the hours on the x axis?
- c) What type of correlation do you see? What does this mean about the relationship between hours spent on social media and maths scores?
- d) Draw a line of best fit
- e) Bobby spends 12 hours on social media a week, use your graph to predict his score on the maths test
- f) Tabitha never uses social media, why might our graph not predict her maths score very accurately?

Answers

1) The size of each sector is as follows; Retriever 156, Alsatian 24, Labrador 60, Staffy 48, Huskey 72

2) Frequencies for each type are; Goatee 40, Van Dike 12, Handlebar 14, Neck beard 6

3a) mean=4.4 median =4 mode=2 range=7

b) mean=5.2 median =5 mode=5 and 7 range=5

c) mean=3 median =3 mode= no mode range=6

4a) quantitative discrete b) qualitative c) quantitative continuous d) quantitative discrete e) quantitative continuous

5a) mode, it is qualitative data b) median, it ignores the extreme value

6) Becky is generally the better sprinter although she is less consistent

7b) it is the independent variable c) negative correlation, the more hours you spend on social media, the worse your maths score is e) about 80 f) 0 hours is outside of our data, we would be extrapolating and this is inaccurate.