

Statistics Revision 1

- 1) The following two way table is the response of 120 punks when they were asked what music genre they preferred.

| | Skacore | Two-tone | Crust | |
|--------|---------|----------|-------|----|
| Male | | 18 | | 83 |
| Female | 4 | | 7 | |
| | | | 32 | |

- a) complete the two way table
b) a person is chosen at random, find the probability that they like Skacore
c) a skacore fan is chosen at random, find the probability that they are male.

- 2) 90 people were asked for their most hated sport and 12 surprisingly replied football.

If I was drawing a pie chart of the results, how large would these people's sector be?

- 3) On a pie chart, I notice that 4 people corresponded to a sector of 20° . How many people were there asked all together.

- 4) Find the mean, median, mode and range of the following:

6, 2, 3, 11, 8, 5, 3, 10, 6

- 5) Find 4 numbers that have a mean of 8, a median of 7 and a mode of 5

- 6) The results of 12 students English and Maths tests are given below:

| | | | | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|----|----|----|----|
| E | 48 | 35 | 70 | 34 | 75 | 19 | 44 | 77 | 28 | 78 | 49 | 43 |
| M | 37 | 25 | 61 | 23 | 60 | 10 | 24 | 69 | 12 | 66 | 41 | 31 |

- a) draw a scatter graph of these results
- b) Abbi got 60 on her English, predict her Maths mark
- c) Brian got 85 on his Maths, why might it be a bad idea to predict his English?
- 7) 30 people were asked how many words they misspell when they type 200 words

| Number of words | Frequency |
|-----------------|-----------|
| 1 | 2 |
| 2 | 9 |
| 3 | 8 |
| 4 | 11 |

- a) find the modal number of words misspelt
- b) find the mean number of words misspelt
- c) find the median number of words misspelt
- 8) The mass of 20 Santas is given below:

| Mass m (kg) | Frequency |
|--------------------|-----------|
| $80 \leq m < 90$ | 5 |
| $90 \leq m < 95$ | 8 |
| $95 \leq m < 100$ | 6 |
| $100 \leq m < 120$ | 1 |

Estimate the mean mass of a Santa

- Answers** 1b) 11/30 c) 10/11 2) 48° 3) 72
- 4) mean=6, median=6, mode=3,6 range=9 5) 5,5,9,13
- 6b) about 49 c) extrapolating is unreliable 7a) 4 b) 2.93 c) 3 8) 93kg