## Consulting in Statistics and Data Science 2024 - Preliminary Quiz

1. Suppose we have the following table giving the number of people in a study that plan to get a COVID-19 vaccination by age.

| Vaccinate | Age less <br> than 40 | Age 40 or <br> more |
| :--- | :--- | :--- |
| Yes | 30 | 60 |
| Maybe | 10 | 15 |
| No | 10 | 5 |

Analyse these data, write a short report of no more than one page and state your conclusions.
2. The weight loss of a sample people on a low carb diet is compared with a sample who use a normal diet over a 12-month period. The results are as follows, in kgs

## Low Carb Diet Normal Diet

3.5
2.1

4,5
1.1
-1.2
0.5
6.2
3.6
3.8
0.5
2.0
-1.0
3.5
4.9

Analyse these data, write a short report of no more than one page and state your conclusions.
3. The following data give the annual retail sales of a sample of small businesses and their expenditure on advertising, measured in \$000s.

## Sales Adverting Expenditure

$302 \quad 12$
$410 \quad 21$
1025
$89 \quad 8$
$154 \quad 15$
$210 \quad 15$
$698 \quad 48$
$69 \quad 0$
$99 \quad 3$
$24 \quad 0$

Analyse these data, write a short report of no more than one page and state your conclusions.

