
Bridging work Year 12 September 2022

Task 1: Research methods – Maths skills

Research methods is worth 25% of your overall grade and within that 10% is focused on maths skills. As you have all been learning GCSE maths until very recently, most of these skills should be straightforward for you. Please work your way through the following questions. There should be room for you to write your answers and do working out as you go. I will go through the answers with you in September.

Using percentages, fractions and decimals

Convert to a decimal

a) $\frac{1}{2}$

b) $\frac{3}{40}$

c) 65%

d) 153%

e) 51.6%

f) 41%

Convert to a fraction, reduced to simplest form

g) 0.2

h) 0.62

i) 90%

Convert to a percentage

j) 0.87

k) 2.11

l) 0.017

m) 2.91

n) $\frac{9}{10}$

o) $\frac{2}{5}$

Convert to a fraction:

p) 67%

Sample question

A Psychologist investigated whether recall was affected by the way the material was presented. One group was given pictures to recall, the other group were given words.

Number of Pictures Recalled	Number of Words Recalled
7	4
5	6
10	7
8	5
7	6
5	5
7	9
9	3

Calculate the measures of central tendency for the following set of raw data.

Condition 1 (Numbers of pictures recalled)

a) Mode =

b) Median =

c) Mean =

Condition 2 (Number of words recalled)

d) Mode =

e) Median =

f) Mean =

Sample Question

Look at the pie chart below What fraction of divorced adults had a type B attachment?

A pie chart to show the distribution of infant attachment types of divorced adults



- A. $\frac{1}{5}$
- B. $\frac{3}{10}$
- C. $\frac{2}{5}$
- D. $\frac{1}{2}$

5) Ratios

Simplify

- a) 5 : 10
- b) 15 : 5
- c) 5 : 50
- d) 52 : 56
- e) 52 : 12
- f) 52 : 56
- g) 18 : 22 : 12
- h) 16 : 52 : 48
- i) 42 : 15 : 24

Sample question

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Number of Pictures Recalled	Number of Words Recalled
7	4
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Calculate the measures of central tendency for the following set of raw data.

Condition 1 (Numbers of pictures recalled)

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b) Median =

c) Mean =

Condition 2 (Number of words recalled)

d) Mode =

e) Median =

f) Mean =

7) Displaying Data

Graphs, charts and tables are all used to describe data and make it easier for the data to be understood.

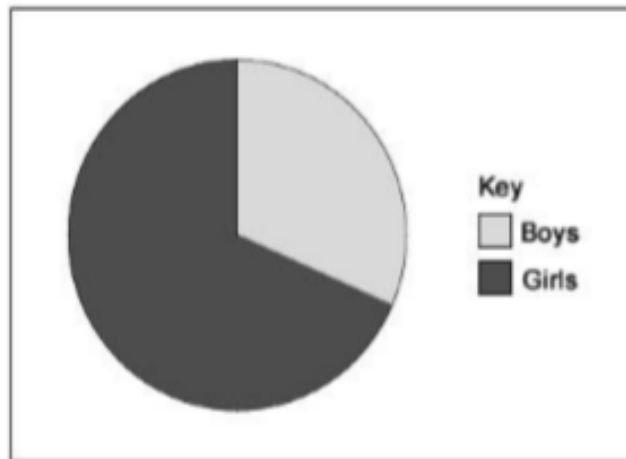
There are a number of graphs and charts that you need to be able to draw and interpret, they include:

- Tally chart (frequency table)
- Line graph
- Pie chart
- Bar chart
- Histogram
- Scatter diagram

Sample questions

A researcher is investigating gender differences in classification of attachment. They conduct a study using Ainsworth's 'Strange Situation'. The results are shown in the figure below.

The proportions of boys and girls who are classified as securely attached



- (a) Using the information in the figure, estimate the percentage of boys and girls that are securely attached.

Boys =

Girls =

(2)

- (b) In a different study, 150 children were classified as securely attached. Of these, 40% were boys. How many of the 150 children were girls? Show your workings.

(2)

Task 2: Timeline of Psychology

Create your own A4 (or A3) Psychological History timeline. On your timeline you should include a number of features such as the ones below (but not necessarily ONLY these). To make a high quality timeline, you will need to do some additional research into what each of the events actually refers to – and why it might have been important to the development of Psychology.

A great link for this task is <https://allpsych.com/timeline/>.

There are also videos available on YouTube, such as this one:

<https://www.youtube.com/watch?v=CsxKcY94EB4>



You should spend no more than two hours researching (including watching Youtube clips) and creating your timeline

