

$$\frac{3x \times (x+1)^2}{3x^2 \times (x+1)^2} = \frac{x+1}{x}$$

CHANCE AND DATA

MATHS

LEVEL 1

Study Checklist

If you've picked up this checklist, congrats! You've begun the first step in a system of resources designed to help you through the Chance and Data external. To make the most of this, we suggest you sit down, grab a pen, and mark any points that you're feeling a little unsure of. Then, create a subject audit using our template, or refer to the page numbers to find the section in our walkthrough guide to help you out!

BASIC PROBABILITY

- I can define the term 'probability', and give the range or numbers it is measured between [TBC]
- I can calculate a probability as a fraction [TBC]
- I can calculate a probability as a decimal/proportion [TBC]
- I can calculate a probability as a percentage [TBC]
- I can explain what 'favourable outcomes' means [TBC]

BASIC FEATURES OF DATA

- I can use a two-way table to find a probability [TBC]
- I can explain what the mean is, and calculate it from a set of data [TBC]
- I can explain the difference between the mean and median [TBC]
- I can find the minimum, maximum, median, and range of a set of data [TBC]
- I can find the Lower quartile (LQ), Upper quartile (UQ), and the Interquartile range (IQR) of a set of data [TBC]

FEATURES OF GRAPHS

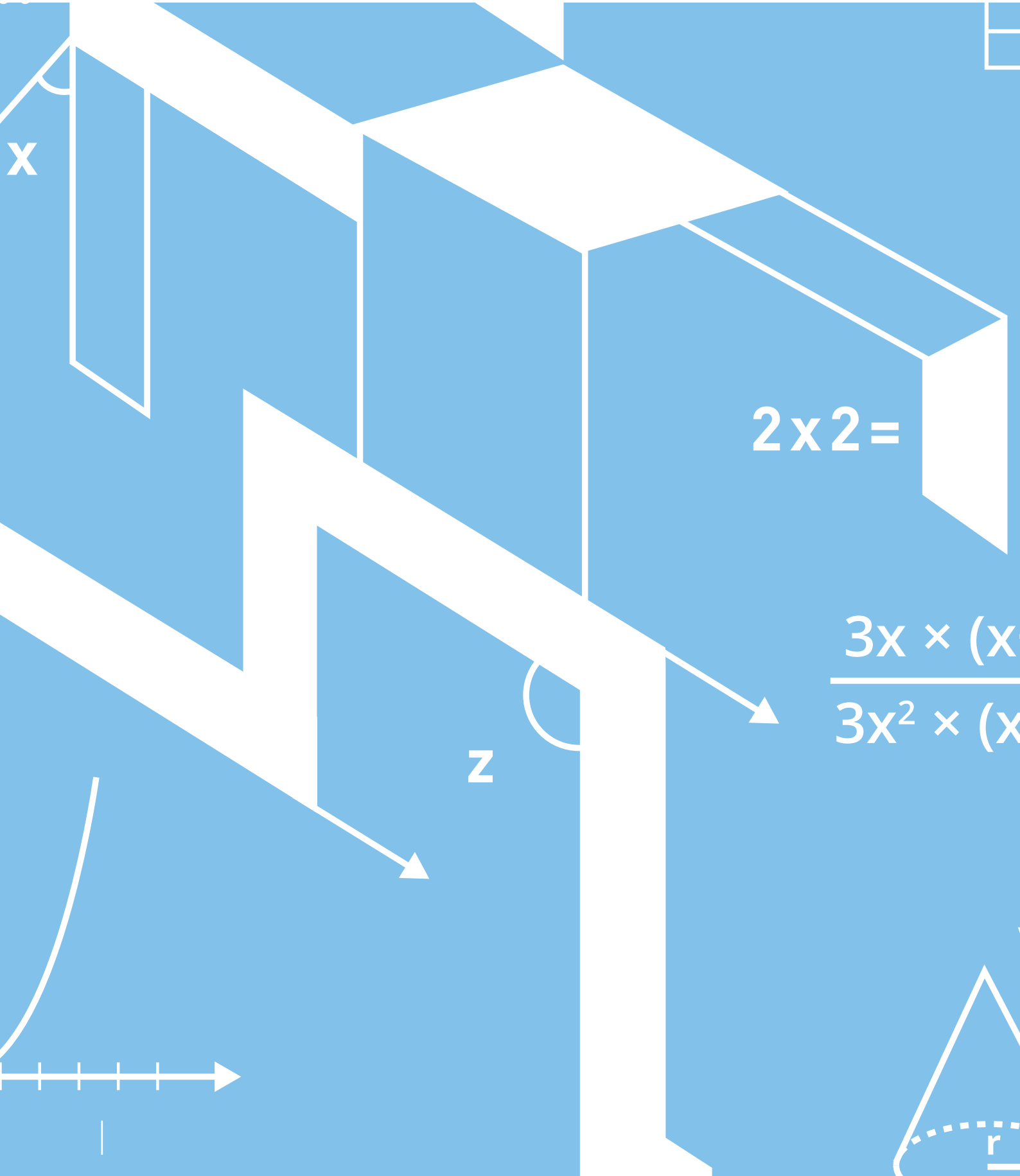
- I can explain what a dot plot is and when it's used [TBC]
- I can explain what a box plot is and when it's used [TBC]
- I can explain what a scatter plot is and when it's used [TBC]
- I can explain what a time series graph is and when it's used [TBC]

ANALYSING DATA

- I can explain what an outlier is [TBC]
- I can identify an outlier and provide possible explanations for it [TBC]
- I can explain what 'shift' is [TBC]
- I can identify shift in a box plot and explain what this means in context [TBC]
- I can explain what 'skew' is [TBC]
- I can identify left/right skew in a dot plot [TBC]
- I can identify and explain clusters [TBC]
- I can identify the strength and direction of a trend in context [TBC]

ANALYSING DATA

- I can calculate conditional probability [TBC]
- I can identify bias in a survey and provide possible explanations for it [TBC]
- I can explain how bias occurs and how to avoid it [TBC]
- I can compare two sets of data [TBC]
- I can determine whether data is valid, by analysing medians and graphs [TBC]



$$2 \times 2 =$$

$$\frac{3x \times (x)}{3x^2 \times (x)}$$