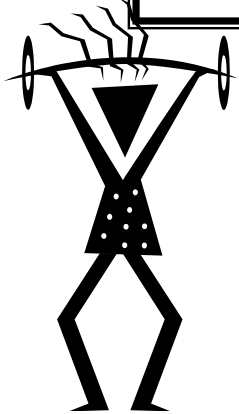


# Mathsercise

Revision Practice  
for Target C grade  
GCSE Handling  
Data



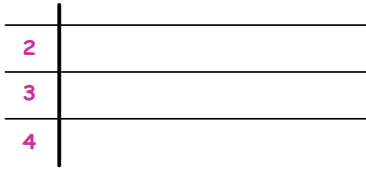


# Mathsercise-C

Stem & Leaf,  
Cumulative Frequency

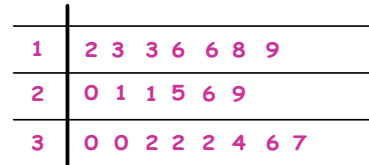
Complete this stem and leaf diagram for the weights of 10 newly born boys (in kg)

4.1 3.6 4.5 2.9 3.8 3.2 3.6 2.8 3.7 2.5



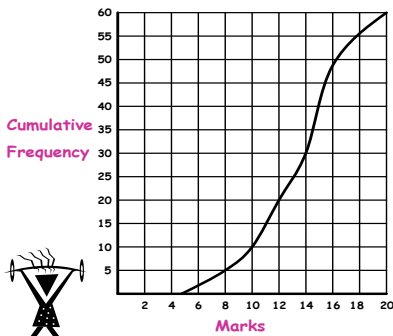
Cumulative Frequency **1**

The stem and leaf table shows the number of students late each day to school last month



a) Find the median  
b) Work out the range Cumulative Frequency **2**

60 students took a test. The graph shows information about their marks

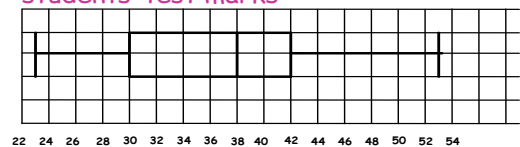


- a) What was the median mark?
- b) What was the lowest mark?
- c) Estimate how many students scored 12 or less marks
- d) Estimate the interquartile range



Cumulative Frequency **3**

This box plot shows information about 40 students' test marks



Which of these statements are true?

- a) The top mark was 54
- b) The range was 35
- c) The median was 42
- d) The interquartile range was 12
- e)  $\frac{1}{2}$  the students scored less than 38



Cumulative Frequency **4**



# Maths exercise-C

## Means

The table shows how much TV 20 students watched in a week

No. of hours	Frequency
$0 < h \leq 20$	8
$20 < h \leq 40$	7
$40 < h \leq 60$	5

Work out an estimate for the mean number of hours that students watched TV



Means **1**

This table shows how much money 25 students had at school

Amount (£)	Frequency
$0 < t \leq 4$	11
$4 < h \leq 8$	3
$8 < h \leq 12$	11

Work out an estimate for the mean amount of money that each student has



Means **2**

The table shows the number of flower bouquets delivered each day of the week

Day	Mon	Tue	Wed	Thu	Fri	Sat
No.	12	8	13	15	14	19

Work out the 3-day moving average for this data



Means **3**

The table shows the daily takings for an ice-cream salesman

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
(£)	50	36	24	90	130	156	264

Work out the 4-day moving average for this data

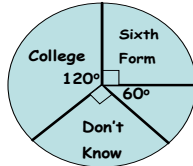


Means **4**



60 students were asked "What do you want to do next year?"

Their replies are shown in the pie chart



How many students hoped to go to college?



Pie Charts **1**

Forty students took the Intermediate maths exam last year

Grade 'B' - 3

Grade 'C' - 15

Grade 'D' - 14

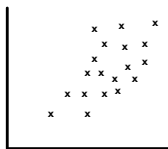
Grade 'E' - 8

If these results were shown in a pie chart, what is the size of angle for each grade?



Pie Charts **2**

Here is a scatter graph. One axis is labelled 'Height'



a) For this graph state the type of correlation

b) From the list below, circle the most appropriate label for the other axis



GCSE Maths Mark

No. of cousins

Size of feet

Colour of eyes

Pie Charts **3**

For each scatter graph, sketch in probable correlations



Colour of eyes



Age



Pie Charts **4**



The probability of it raining is 0.3  
What is the probability of it not raining?



Probability **1**

A train can be early, on time, or late.

The probability of it being late is 0.63, the probability of being early is 0.1

What is the probability of it being on time?



Probability **2**

Here is a probability table of students favourite colours..

Colour	Grey	Blue	Brown	Pink
Probability	0.1		0.3	0.2

Work out the probability of choosing blue



Probability **3**

Here is a probability table of students favourite pets..

Animal	Rabbit	Dog	Mouse	Cat
Probability		0.4		0.26

If the probability of the Rabbit and Mouse is the same, work out the missing values



Probability **4**



# Mathsercise-C

## Probability 2

Mrs Green, the head of the sports college, plays one sport every day. She chooses hockey, swimming or netball

The probability she chooses hockey is 0.3

The probability she chooses netball is 0.25

What is the probability she chooses swimming?



Probability 2 **1**

120 people who buy coffee were surveyed as follows...

	Powder	Granules	Filter	Total
50g	2	4	0	
100g	15	21		50
200g	12			
Total		55		120



Complete the table

Probability 2 **2**

A box contains cubes that are red, yellow, blue, and purple.

The probability of taking a cube of a certain colour is shown in the table

Colour	Red	Yellow	Blue	Purple
Probability	0.15	0.3	0.4	

Work out the probability that you will take a purple cube



Probability 2 **3**

A packet contains sweets with flavours mint, fruit, cola, fizz, and choc

The probability of taking a flavour of sweet is shown in the table..

Flavour	Mint	Fruit	Cola	Fizz	Choc
Probability	10%	0.35	0.15	25%	



Work out the probability that you will take a choc flavoured sweet

Probability 2 **4**



# Mathsercise-C

## Probability Trees

Shay throws a dice 60 times. He scores a six, twenty times.

Is the dice fair?



Probability Trees **1**

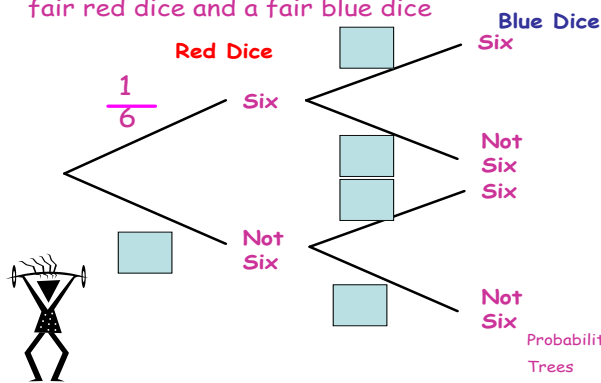
The probability of a green light at traffic lights is 50%.

What is the probability of hitting green lights at two consecutive traffic lights?



Probability Trees **2**

Complete this probability tree for throwing a fair red dice and a fair blue dice



Look at question 3.

What is the probability of not throwing a six with either a red or a blue dice?



Probability Trees **4**



# Maths exercise-C

## Two Way Tables

	French	Spanish	German	Total
Male	24	41	5	
Female		32		
Total	58		26	

Each student in Y11 studies exactly one modern foreign language.

Complete this two-way table



Two-Way Tables **1**

	Boys	Girls	Total
Correct			
Incorrect			
Total			

40 Students answered a question

24 of the students were girls

7 boys got the question correct

11 girls got the question incorrect

Use this information to complete the table



Two-Way Tables **2**

Students were asked how they liked their potatoes

	Chips	Mashed	Baked	Total
Boys	38		5	58
Girls		2	21	
Total	65			

Complete the two-way table  
What is the probability of selecting, at random, a girl who likes chips?



Two-Way Tables **3**

100 adults were asked which sport they disliked most

	Football	Rugby	Hockey	Total
Female	23	11		38
Male		24		
Total		35	38	

Complete the table  
What is the probability that a female will dislike rugby?



Two-Way Tables **4**





# Mathsercise-C

HD Special  
Revision Mixture

Shahid listed the number of goals scored by each team in his local hockey league in order

7, 12, 13, 18, 19, 24, 31, 34, 39, 42, 56

- Find (i) The lower quartile
- (ii) The upper quartile



HD Mixture **1**

Here are the times, in minutes, taken to complete maths homework

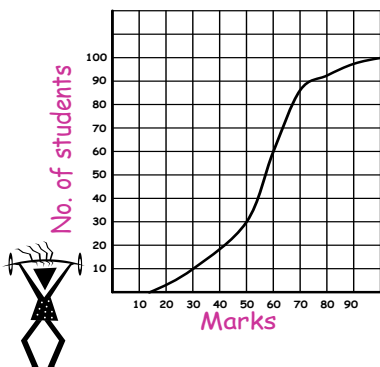
12, 25, 19, 24, 27, 31, 37, 11, 28,  
29, 35, 38, 10, 11, 27, 32, 29, 16

Draw a stem and leaf diagram to show this



HD Mixture **2**

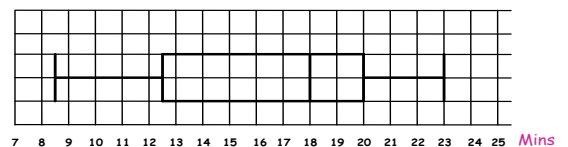
100 students took a test, the graph shows information about their marks



- (i) Estimate the lowest and highest marks
- (ii) Estimate the median score
- (iii) Find the interquartile range

HD Mixture **3**

This box plot shows information about the time taken for 24 girls at the swimming club to swim 800m in training



Describe the times of the swimmers with reference to median, slowest, fastest, and interquartile range



HD Mixture **4**