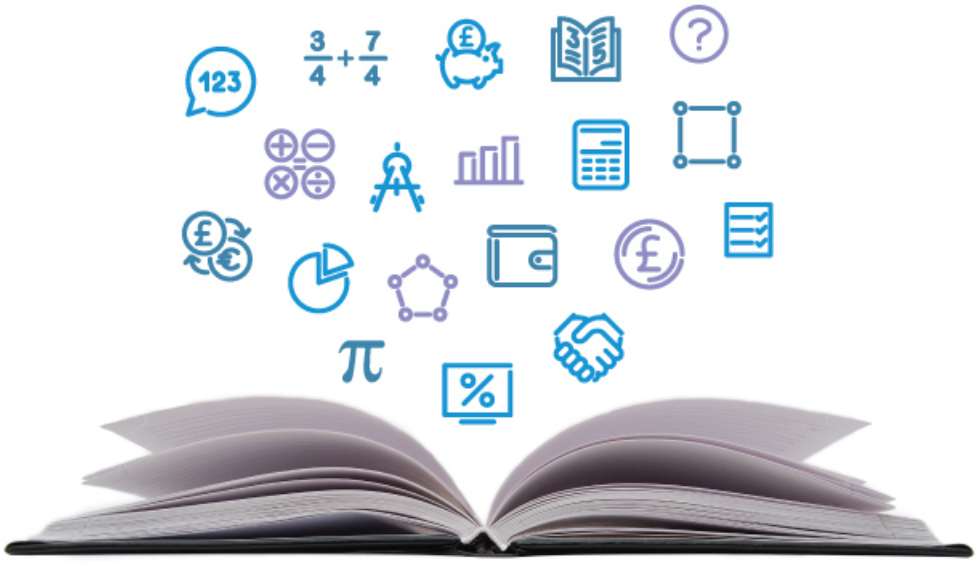
LEVEL 1 FUNCTIONAL SKILLS IN MATHEMATICS

(8361)

Teaching guidance

For teaching from September 2019

Version 1.0 Spring 2020



Our specification is published on our website (www.aqa.org.uk). We will let centres know in writing about any changes to the specification. We will also publish changes on our website. The definitive version of our specification will always be the one on our website, this may differ from printed versions.

You can download a copy from our All About Maths website (http://allaboutmaths.aqa.org.uk/)

Contents

General Information - Disclaimer

This teaching guidance will help you plan by providing examples of the content of the specification.

It is not, in any way, intended to restrict what can be assessed in the question papers based on the specification.

Contexts

The following is a list of likely contexts that will be used in our papers. It may not be exhaustive:

- working for a company
- running your own business
- going on holiday
- going on an outing
- going to a sports or entertainment event
- organising a party or other event
- shopping
- personal finance

Assumed knowledge

Functional Skills Level 1 assumes all the knowledge and skills from the Entry Level Certificates in Functional Skills.

Functional Skills Level 2 assumes all the knowledge from Functional Skills Level 1.

Command words

The following command words are the ones we will generally use. For specific purposes we may use other command words.

- Work out: this will be the usual instruction when one or more calculations are required to get to the answer.
- Calculate: this will be used when the student is expected to use a calculator to carry out a given calculation.
- 'How many … can …' implies that we are asking for the maximum number.

1 Use of number and the number system

Students at Level 1 are expected to be able to count in steps of various sizes, including negative numbers; read, write and understand positive whole numbers to one million. They can order and compare whole numbers of any size, and fractions, ratios and decimals and recognise the effect of multiplying and dividing by powers of 10, 100 and 1000. They can identify, compare and extend a range of numerical and spatial patterns, use, understand and calculate with fractions, decimals and percentages and calculate simple interest.

Note: students are expected to be able to add and subtract numbers up to one million with or without a calculator, multiply or divide by any positive integer from 1 to 12 without a calculator and multiply and divide by any positive integer up to one million with a calculator.

NS1 Read, write, order and compare large numbers (up to one million)

Teaching Guidance

Students should be able to:

- know and use the word integer
- read a positive integer value in number form and write it in words
- read a positive integer value in word form and write it in number form
- compare positive integers and know which is the smallest or largest
- order a list of positive integers from smallest to largest or largest to smallest
- compare positive and integers in context and infer how they should be interpreted.

GCSE Link – N1

Examples

1 Put these numbers in order starting with the smallest.

1567 156 615 546 15 67

2 Write three hundred and two thousand in digits.

3 Write 6734 in words.

4 Which is closer to 1000, 967 or 1043

5 Write these numbers in order, starting with the smallest.

338 349 460 297 38 695 905 502 97 993 189 900

6 John's annual salary is £30 050 and Kiran's annual salary is £29 900

Who has the larger salary?

NS2 Recognise and use positive and negative numbers

Teaching Guidance

Students should be able to:

- know that numbers can be positive, negative or zero
- understand negative as less than zero
- compare positive and/or negative integers in context and infer how they should be interpreted.

GCSE Link – N1, N2

Examples

1 Circle the positive integer: 1.3 24 –12 $\frac{1}{2}$ –6.7

2 In a quiz, you score +2 points for a correct answer and –1 point for an incorrect answer.

Melanie had 12 correct answers and 8 incorrect answers.

What was her total score?

3 The temperature in Iceland was –9°C and the temperature in Norway was –11°C

Which country had the higher temperature?

NS3 Recognise and use positive and negative numbers

Teaching Guidance

Students should be able to:

- add, subtract, multiply and divide using commutative, associative and distributive laws
- understand the effect on place value of multiplying by 10, 100 or 1000
- multiply and divide positive and negative numbers with up to 2 decimal places by 10, 100 or 1000
- apply this knowledge to measures and amounts.

Note – see NS7

GCSE Link – N1, R1

Examples

1 Work out 7.56 × 1000

2 Write down the place value of 8 in the answer to 2850 × 10

3 Work out 123 ÷ 100

4 Widgets cost £15.23 each. Work out the cost of 10 widgets.

5 Work out 3.6 × 1000

6 Work out –864 ÷ 100

7 Work out 97 000 ÷ 10

NS4 Use multiplication facts and make connections with division facts

Teaching Guidance

Students should be able to:

- recognise multiplication and division as inverse operations
- recall all multiplication facts to 12 × 12 and use them to derive the corresponding division facts
- given a multiplication fact, derive the related division facts.

GCSE Link – N2, N3

Examples

1 12 × 6 = 72

Write down the answer to 72 ÷ 6

2 9 × 25 = 225

Work out 450 ÷ 9

3 371 × 28 = 103 880

Work out 103 880 ÷ 7

NS5 Use simple formulae expressed in words for one- or two-step operations

Teaching Guidance

Students should be able to:

- substitute numerical values into formulae written in words
- carry out suitable operations and manipulations as described in a formula in words which may be unfamiliar to them
- interpret the instructions within a given context.

GCSE Link – A2

Examples

1 To convert a distance in miles to a distance in kilometres, use these steps

Step 1: multiply by 8

Step 2: divide your answer to Step 1 by 5

Use the steps to convert 300 miles into kilometres.

2 Use the formula

wage earned = hours worked multiplied by hourly rate plus bonus

to calculate the wage earned when Sarah works for 30 hours at an hourly rate of £8.50 and receives a bonus of £46

NS6 Calculate the squares of one-digit and two-digit numbers

Teaching Guidance

Students should be able to:

- know that a number multiplied by itself is a square number
- recall the squares of numbers from 1 to 12
- use standard methods to work out the squares of 2-digit numbers
- use a calculator to work out the squares of 2-digit numbers.

GCSE Link – N6

Examples

1 Write down the value of 6^2

2 Work out the value of 37^2

3 Work out $92^2 - 45^2$

NS7 Follow the order of precedence of operators

Teaching Guidance

Students should be able to:

- use conventional notation for precedence of operations (including brackets, but not including powers and functions).

GCSE Link – N2, N3

Examples

1 Work out (4 + 12) ÷ 4

2 Work out 3 + 4 × 5

3 Work out 7 × 12 – 8 ÷ 2

4 Work out 7 × (12 – 8) ÷ 2

5 Work out 7 × (12 – 8 ÷ 2)

6 Work out (7 × 12 – 8) ÷ 2

NS8 Read, write, order and compare common fractions and mixed numbers

Teaching Guidance

Students should be able to:

- know and use the word fraction
- know and use the term mixed number
- read a positive fraction or mixed number in number form and write it in words
- read a positive fraction or mixed number in word form and write it in number form
- compare positive fractions and mixed numbers and know which is the smallest or largest
- order a list of positive fractions and/or mixed numbers from smallest to largest or largest to smallest
- compare positive fractions and/or mixed numbers in context and infer how they should be interpreted.

GCSE Link – N1, N8

Examples

1 Write these numbers in order, starting with the smallest.

$1\frac{1}{2}$ $1\frac{1}{4}$ $1\frac{2}{3}$ $1\frac{1}{8}$

2 Write three and two fifths in digits.

3 Which is larger, $\frac{5}{2}$ or $2\frac{1}{5}$?

Show working to support your answer.

4 Emily saves $\frac{3}{5}$ of her wages. Jamal saves $\frac{5}{8}$ of his wages.

Who saves the larger fraction of their wages?

Show working to support your answer.

5 Write these fractions in order, starting with the largest.

$\frac{2}{5}$ $\frac{1}{4}$ $\frac{3}{10}$ $\frac{1}{3}$

NS9 Find fractions of whole number quantities or measurements

Teaching Guidance

Students should be able to:

- work out a fraction of a whole number by dividing by the denominator and multiplying by the numerator (or equivalent)
- understand that multiplying an amount by a fraction works out that fraction of the amount
- understand the equivalence of, for example, working out half of an amount and dividing that amount by 2

GCSE Link – N2, N8, N12

Examples

1 Work out $\frac{3}{4}$ of 8

2 Work out $4 \times \frac{7}{8}$

3 Work out $\frac{2}{3}$ of 18 cm

4 Lily makes 240 cards. She sells $\frac{7}{10}$ of them.

How many cards does she have left?

NS10 Read, write, order and compare decimals up to three decimal places

Teaching Guidance

Students should be able to:

- know and use the word decimal
- read a positive decimal in number form and write it in words
- read a positive decimal in word form and write it in number form
- compare positive and/or negative decimal numbers and know which is the smallest or largest
- order a list of positive and/or negative decimal numbers from smallest to largest or largest to smallest
- compare positive and/or negative decimal numbers in context and infer how they should be interpreted.

GCSE Link – N1, N2

Examples

1 Write these numbers in order, starting with the smallest.

4.3 4.04 42.3 4.23 4.203

2 Ian, Erik and Chen run a 100-metre race.

Ian's time is 14.30 seconds, Erik's time is 13.98 seconds and Chen's time is 14.07 seconds.

List the runners in order of first, second and third.

NS11 Add, subtract, multiply and divide decimals up to two decimal places

Teaching Guidance

Students should be able to:

- add or subtract any two or more decimal numbers up to 2 decimal places without a calculator
- multiply or divide any decimal number up to 2 decimal places by an integer without a calculator
- multiply any two decimal numbers up to 1 decimal place without a calculator
- multiply or divide two or more decimal numbers up to 2 decimal places with a calculator.

GCSE Link – N2, N3, N13

Examples

1 Work out (without a calculator) 3.42 + 7.54 – 5.16

2 Work out (without a calculator) 17.12 × 11

3 Work out (without a calculator) 0.83×6

4 Calculate out 28.12 ÷ 9.25

5 The temperature falls by 4 °C from –3.5 °C. Work out the new temperature.

6 Alice is paid an hourly rate of £9.34

Calculate her pay for 6.5 hours.

7 Calculate out 7.36 – 1.83 × 2

NS12 Approximate by rounding to a whole number or to one or two decimal places

Teaching Guidance

Students should be able to:

- round numbers and measures to the nearest whole number
- round numbers to 1 or 2 decimal places
- know that in context some answers need to be rounded up and some need to be truncated (for example, if 4.2 buses are needed, the answer is that 5 buses are needed).

GCSE Link – N15

Notes

Students should know not to round values during the intermediate steps of a calculation unless the context requires it.

Examples

1 Round 17.51 to the nearest whole number.

2 Round 4.62 to 1 decimal place.

3 Round 0.406 to 2 decimal places.

4 Calculate out 5.62 × 13.55

Give your answer to 1 decimal place.

5 How many 40-seater coaches are needed to carry 130 students?

6 Bags of sweets contain 12 sweets.

How many bags can be filled with 70 sweets?

NS13 Read, write, order and compare percentages in whole numbers

Teaching Guidance

Students should be able to:

- read a percentage in number form and write it in words
- read a percentage in word form and write it in number form
- compare percentages and know which is the largest/smallest
- order a list of percentages from smallest to largest or largest to smallest
- compare percentages in context and infer how they should be interpreted.

GCSE Link – N1, N9

Notes

Percentages will be given as whole numbers, which may be greater than 100%

Examples

1 Write fifty three per cent in digits.

2 Write these percentages in order, starting with the smallest.

3 The interest rate on loans at Bank A is 5% and the interest rate on loans at Bank B is 6%

Which bank is it cheaper to borrow money from?

4 The interest rate offered on savings by Bank A is 2% and the interest rate offered on savings by Bank B is 3%

Which bank is it better to save with?

NS14 Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof

Teaching Guidance

Students should be able to:

- define percentage as “number of parts per hundred”
- work out a percentage of an amount, where the percentage is a multiple of 5%
- solve problems involving percentage increase/decreases
- solve problems involving simple interest in financial mathematics, including over repeated time periods
- understand that a discount is a percentage decrease.

GCSE Link – N2, N12, R9

Notes

Percentages will be given as multiples of 5% up to 95%

Examples

1 Work out 5% of 320

2 Work out 25% of £18 000

3 Work out 95% of 800 metres.

4 Increase 768 by 15%

5 Chris earns £285 per week.

He gets a 5% pay rise.

How much per week does he earn now?

6 Paving slabs cost £3.40 each.

A supplier offers ‘20% off when you spend more than £300’

How much will it cost to buy 100 paving slabs?

7 The attendance at a football match was 48 400

There was a 10% increase in the attendance at the next game.

What was the attendance at that game?

NS15 Estimate answers to calculations using fractions and decimals

Teaching Guidance

Students should be able to:

- in a question where a fraction of a quantity is required, round the quantity to make the calculation easier, eg when asked to estimate one quarter of 7943, rounding 7943 to 8000
- in a question where an amount has to be multiplied or divided by a decimal, round the decimal to make the calculation easier, eg when asked to estimate 240 × 4.98, rounding 4.98 to 5

GCSE Link – N14

Notes

Students should only round in calculations when asked for an estimate or when checking the sense of an answer.

Examples

1 Estimate one eighth of 1589

2 Estimate 840 × 0.249

3 Work out the exact value of 9.8 x 109

Use approximations to decide whether your answer is sensible.

4 Jim buys 298 tiles for 24p each. He is charged £71.52

Show how he could use approximations to check this amount.

NS16 Recognise and calculate equivalences between common fractions, percentages and decimals

Teaching Guidance

Students should be able to:

- convert between $\frac{1}{10}$, 10% and 0.1 and multiples thereof
- convert between $\frac{1}{4}$, 25% and 0.25 and multiples thereof
- express a whole number percentage as a fractions with denominator 100

GCSE Link – N10, R9

Examples

1 Write 30% as a decimal.

2 Write 0.75 as a fraction.

3 Write 20% as a fraction.

4 Write $\frac{3}{5}$ as a percentage.

5 Write $\frac{7}{10}$ as a decimal.

6 Wendy eats 90% of her pizza. What fraction of the pizza is left?

NS17 Work with simple ratio and direct proportions

Teaching Guidance

Students should be able to:

- recognise and use ratio notation in the form 1 : n or n : 1, where n is an integer
- relate ratios to fractions
- understand and use simple proportion when working out values
- solve simple best-buy problems by working out the price of individual items.

GCSE Link – R4, R5, R6, R7, R8, R10

Examples

1 A recipe for fruit cake uses sultanas and raisins in the ratio 5 : 1

How many grams of raisins should be used with 150 grams of sultanas?

2 Jen and Kim pay for a present for their mum in the ratio 1 : 2

Jen pays £21

(a) How much did the present cost?

(b) What fraction of the total amount did Jen pay?

3 Charlie can make 25 cakes with 1 kg of flour.

How many cakes can he make with 3 kg of flour?

4 5 rolls of wallpaper cost £37.50

How much would 8 rolls of the same wallpaper cost?

5 Which is better value, 6 batteries for £5.10 or 10 batteries for £8?

You **must** show your working.

2 Use of measures, shape and space

Students at Level 1 are expected to be able to work out simple relationships between common units of measurement to define quantities, also involving mathematical terms for position and direction. They can apply and use calculations with common measures including money, time, length, weight and capacity. They can visualise, draw and describe 2-D and 3-D shapes and use properties of 2-D shapes.

M1 Calculate simple interest in multiples of 5% on amounts of money

Teaching Guidance

Students should be able to:

- understand the terms 'interest' and 'simple interest'
- work out an amount of interest at a rate which is a multiple of 5%
- work out the total amount after addition of interest at a rate which is a multiple of 5%

GCSE Link – R9

Examples

1 5% interest is paid on an amount of £1300

Work out the interest.

2 Cheryl puts £2000 into an account that pays 15% simple interest per year.

How much is in the account after 1 year?

M2 Calculate discounts in multiples of 5% on amounts of money

Teaching Guidance

Students should be able to:

- understand the terms 'discount', 'decrease' and 'reduction'
- work out a discount, decrease or reduction which is a multiple of 5%
- work out an amount after a discount, decrease or reduction by a multiple of 5%

GCSE Link – R9

Examples

1 A holiday is on sale for £560

It receives a discount of 15%

How much is the discount?

2 The value of a new car is £12 500

In the first year its value decreases by 45%

Work out its value after the first year.

M3 Convert between units of length, weight, capacity, money and time, in the same system

Teaching Guidance

Students should be able to:

- convert between metric measures
- recall and use conversions for metric measures for length, weight and capacity
- recall and use conversions between seconds, hours and days
- know that there are 7 days in a week
- know the number of days in each month and the order of months
- know that there are 12 months in a year
- know that there are 365 days in a non-leap year
- know that there are 366 days in a leap year
- know that there are 52 full weeks in a year.

GCSE Link – R1, G14

Notes

Conversion between imperial measures other than time will only be tested if conversion factors are given in the question. Students should be able to work in imperial units such as inches, miles and ounces.

Examples

1 Convert 155cm to metres.

2 Convert 2.76 kilometres to metres.

3 Convert 8900 grams to kilograms.

4 Convert 215 minutes into hours and minutes.

5 How many millilitres are there in 2.75 litres?

6 There are 12 inches in a foot.

How many inches are there in 6 feet?

7 Amir and Rana go on holiday for 14 nights.

They leave on June 26th.

What is the date when they return?

8 Ellie runs 3500 metres each day for 5 weeks.

How far does she run altogether?

Give your answer in kilometres.

9 There are 16 ounces in a pound.

How many ounces are there in $2\frac{3}{4}$ pounds?

M4 Recognise and make use of simple scales on maps and drawings

Teaching Guidance

Students should be able to:

- use and interpret simple maps and scale drawings
- use a simple scale on a map to work out an actual length
- construct a simple scale diagram.

GCSE Link – R2, G15

Examples

1 Use a scale of 1 cm to 1 metre to work the length of an object drawn on 1 cm square paper.

2 Use a network diagram, where 1 cm represents 1 mile, to work out the distance between two towns.

3 Describe the relative position of two places on a simple street map.

4 Bob's garden measures 8 m by 11 m. He wants to place a rectangular flower bed of area 12 m^2 along one edge. Draw a plan on this 1 cm^2 paper.

M5 Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles

Teaching Guidance

Students should be able to:

- recall and use the formula for the area of a rectangle
- know that area is measured in square units
- know that the perimeter of an object is the sum of the lengths of its external edges
- know that perimeter is a length
- know how to calculate the area of a compound shape made of rectangles
- know that an L-shape is made of two rectangles
- calculate the area of a compound shape given the areas of its component shapes
- calculate the area of shapes drawn on a grid.

GCSE Link – G1, G12, G16, G17

Notes

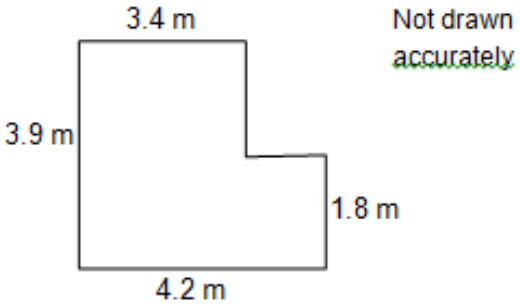
Students should know the language of 2-D shapes – edge (including midpoint of an edge), corner, vertex, vertices.

Examples

1 A desk is a rectangle measuring 70 cm by 55 cm

Work out the perimeter and area of the desk.

2 A room is an L-shape.



(a) The floor is covered by carpet.

Work out the area of the carpet.

b) Skirting board is put around the base of all the walls apart from 1.2 metres for a door.

Work out the total length of the skirting board.

M6 Calculate the volumes of cubes and cuboids

Teaching Guidance

Students should be able to:

- recall and use the formula for the volume of a cuboid or cube
- know that volume is measured in cubic units.

GCSE Link – G1, G16

Examples

1 Work out the volume of a cuboid with lengths 4 cm, 5 cm and 6 cm

State the units in your answer.

2 A cube has side length 7 cm

Work out the volume of the cube.

3 A fish tank is a cuboid measuring 120 cm by 30 cm by 62 cm

How many litres of water can the tank hold?

Use 1000 cm^3 = 1 litre

M7

Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles

Teaching Guidance

Students should be able to:

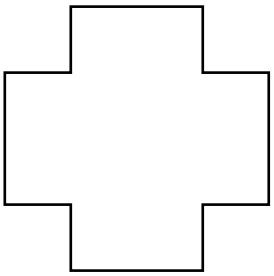
- create accurate representations of common 2-D shapes using a straight edge
- know and compare the types of angle sizes – acute angle, right angle, obtuse angle and reflex angle
- identify and mark lines of symmetry on a shape
- deduce the properties of shapes from their symmetries.

GCSE Link – G4, G7

Examples

1 Draw a rectangle with length 8 cm and width 6.5 cm

2 Show the lines of symmetry on this shape.



3 Which is bigger – an acute angle or an obtuse angle?

4 A shape has one line of symmetry.

Which of these shapes could it be?

Circle your answer.

Square	Equilateral triangle	Rectangle	Isosceles triangle

M8 Interpret plans, elevations and nets of simple 3-D shapes

Teaching Guidance

Students should be able to:

- mark a net with the corresponding position of a face on a drawing of a cuboid
- match a net to a shape
- know if a given net will make a particular 3-D shape
- match plans and elevations to their corresponding shape
- know what plans and elevations are and apply this knowledge to problems
- use a plan to show a required arrangement of items.

GCSE Link – G1, G12, G13

Notes

When drawing nets, students should not add 'flaps' to the side.

Examples

1 Draw a net of a cuboid measuring 2 cm by 3 cm by 5 cm

2 Identify a net of a cube from four given diagrams.

3 Match a plan, an elevation or a nets to a given 3D shape.

4 Design an office on a plan given certain requirements.

M9 Use angles when describing position and direction, and measure angles in degrees

Teaching Guidance

Students should be able to:

- give directions such as “Turn 45° to the left”
- use a protractor to measure angles accurately
- know that a complete turn has 360°, that a half turn has 180° and that a right angle is equivalent to a quarter turn and has 90°
- know the points of the compass and apply angles to them, eg know that North and West are separated by a 90° turn anticlockwise and that South and South West are separated by a 45° turn clockwise.

GCSE Link – G1, G3, G15

Examples

1 (Given a street map) Describe how to get from the post office to the library.

2 (Given a street map) Alice heads north from the library for 200 m, turns 90° to the right and carries of for 100 m

Which building is she beside?

3 Bob is facing East.

He turns 180°

Which direction is he facing now?

4 Alice is facing North.

She makes a quarter turn left.

Which way is she facing now?

5 What is the angle of turn if you turn clockwise from North to South West?

3 Handling information and data

Students at Level 1 are expected to be able to select, construct and interpret a range of statistical diagrams in various contexts; select and use methods and forms to present and describe outcomes. They can extract and interpret information from tables, diagrams, charts and graphs; apply simple statistics and recognise features of charts to summarise and compare sets of data; recognise and use the probability scale and interpret probabilities.

H1 Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs

Teaching Guidance

Students should be able to:

- complete a tally chart and a frequency table given a set of discrete data
- draw and interpret bar charts, including dual bar charts and composite bar charts
- draw and interpret pictograms
- draw and interpret vertical line charts
- draw and interpret pie charts, where the sectors are simple fractions of 360°
- understand which of the diagrams are appropriate for different types of data.

GCSE Link – S2, S4

Examples

1 (Given the numbers of goals in 30 football matches) Construct a tally chart and frequency table to represent the data.

2 (Given sales data for the months January to June) Draw a bar chart to show sales each month.

3 (Given a vertical line chart) Alice says that she sold 3 times as many cakes in May as April.

Is she correct?

4 (Given a pie chart) Which is the least popular sport?

5 (Given a set of data about numbers of cars of different colours) Draw a pictogram to represent the data.

H2 Group discrete data and represent grouped data graphically

Teaching Guidance

Students should be able to:

- construct a tally chart and frequency table for grouped data
- draw and interpret a bar chart for grouped data (not a histogram with equal widths).

GCSE Link – S2, S4

Notes

A bar chart for grouped data should have labels such as 1-3, 4-6, 7-9, etc with equal widths between the bars.

Examples

1 Given the ages of 50 people:

(a) Complete the tally chart and frequency table to represent the data.

(b) Draw a bar chart to represent the data.

H3 Find the mean and range of a set of quantities

Teaching Guidance

Students should be able to:

- work out the mean of a set of values
- know that the mean is an average
- use the maximum and minimum values of a set of data to work out the range
- know that the range is a measure of spread
- now that a smaller range implies less variability or greater consistency
- compare two means and draw conclusions
- compare two ranges and draw conclusions.

GCSE Link – S4

Examples

1 Here are Alice's running times in minutes for 10 half-marathons.

93 89 101 95 87 103 91 93 97 100

In the same 10 half-marathons, Kelly had a mean time of 92 minutes and a range of 23 minutes.

(a) Who had the better mean time?

You must show your working.

(b) Who had more consistent times?

You must show your working.

H4 Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events

Teaching Guidance

Students should be able to:

- know the language of descriptive probabilities – impossible, unlikely, equally likely (even chance), likely and certain
- compare the probability or likelihood of two or more outcomes

GCSE Link – P2, P3, P4

Notes

When two probabilities are to be compared the population for each will be the same, so students will be able to compare qualifying numbers without representing them as probabilities.

Examples

1 (Given a marked probability scale) Describe the probability of rain during the trip.

2 (Given a marked probability scale) Bob says that it is very likely that more than 300 people will turn up.

Is he correct?

3 (Given data) Arrange the likelihood of these events on the probability scale.

4 In his 10 attempts, Dan hit the bullseye on a dart board 3 times.

In her 10 attempts, Gina hit the bullseye 5 times.

Based on these results, who is more likely to hit the bullseye?

H5 Use equally likely outcomes to find the probabilities of simple events and express them as fractions

Teaching Guidance

Students should be able to:

- work out a simple probability given equally likely outcomes
- give simple probabilities as a fraction
- know that if the probability of an event happening is P, the probability of the event not happening is 1 – P

GCSE Link – P2, P3, P4

Examples

1 Alice rolls a fair, ordinary dice.

Write down the probability that she gets a 5

2 Bob buys 10 raffle tickets.

200 tickets are sold altogether.

What is the probability that Bob wins?

3 The probability that it rains tomorrow is 0.2

Work out the probability that it **does not** rain tomorrow.

Get help and support

Visit our website for information, guidance, support and resources at aqa.org.uk/maths

You can talk directly to the Maths subject team

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SP/08/14