Write your name here

Surname	Other names

Grade One and Two Paper
Level 1 / Level 2
GCSE (9–1)

Centre Number | | | | | |

Candidate Number | | | | |

Mathematics Paper K

Mock Exam Feedback

Mock Exam Feedback
Time: 1 hours 20 minutes

Paper Reference
Grade 2-4

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.
Tracing paper may be used.

Total Marks
60

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may be used.**

Information

- The total mark for this paper is 60
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Answer all the questions.

Q1 A school had 648 students in total in Years 9, 10 and 11.

The school offered three foreign languages: French, German and Spanish.

Of the 232 students that took French, 91 were in Year 10.

Thirty-seven of the 211 students in Year 10 studied Spanish.

Sixty-four of the 219 students who chose German were in Year 9.

In Year 11, 141 students studied French and Spanish.

The French teachers catered for 83 Year 9 students in their subject.

a Complete the two-way table below.

(4)

b A student from Year 10 is selected at random. What is the probability that the student selected studies German?

……

(2)

c Two students are selected from the school. What is the probability that both students are from Year 10?

……

(2)

d One student is selected at random. The probability of a student with the same attributes as this one being selected is $\frac{1}{9}$. In what year group is the student and subject do they study?

……

(3)

e What percentage of the total student population study Spanish?

……

(3)

Q2 Multiply 21.8×1.67.

……

(3)

Q3 Using your calculator, determine the value of the following:

$$\sqrt{\frac{26.7 + 3.7^2}{8.4 - 6.71}}$$

Write down all the figures on your calculator.

……

(2)

Q4 Steve, James and Natalie decide to go on holiday to Spain for a fortnight.

Both Natalie and Steve look for flights. Steve finds a flight that would cost them £452 each. Natalie finds a flight that costs £1446.00 altogether, but the travel agent said that they would knock off five percent of the flight cost if they booked within 48 hours.

James found the accommodation which he booked for £117 per person per night.

Natalie ordered £900 spending money which she got changed into Euros at a rate of 1:1.27 pounds to the euro.

Travel insurance cost £43.57 each.

a Whose flight booking should the friends choose and how much money did that choice save them?

……

(3)

b How much was the accommodation on holiday?

……

(2)

c How many Euros did Natalie get in exchange for the £900?

……

(2)

d The three friends split the cost of the holiday equally. How much did Natalie have to pay for the holiday?

……

(3)

Q5 Divide 31.25 by 8.3. Give the answer correct to 3 significant places.

……

(3)

Q6 Divide 500.4 by 3.6.

.....

(3)

Q7 Using a calculator, find $\sqrt{\frac{13.9-9.14}{4.3+7.24^3}}$

.....

(3)

Q8 A map has a scale of 1:25000. A route on the map is 17cm long. How far is this distance in km?

……

(3)

Q9 Another map has a scale of 1:80000. How long would the same route be when it was seen on the new map?

……

(3)

Q10 Put the following numbers into ascending order.

-3.5 -3.04 -3.26 3.0832 3.00931

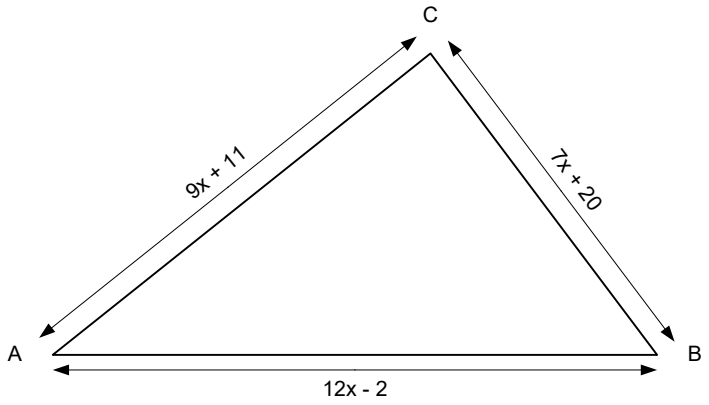
……

(1)

Q11 ABC is a triangle.

The perimeter of ABC is 225 cm.

Find the value of x.



.....

(4)

Q12 Use your calculator to find the answer to $\frac{3}{\sqrt{16.4+39.7}} + \sqrt{\frac{3}{16.4^2-12.3}}$

Write all the digits that your calculator shows.

……

(2)

Q13 A map has a scale of 1:25,000. Billy draws a line that is 17cm on the map. How far does this line represent in real life?

……

(2)

Q14 Put the following numbers in ascending order.

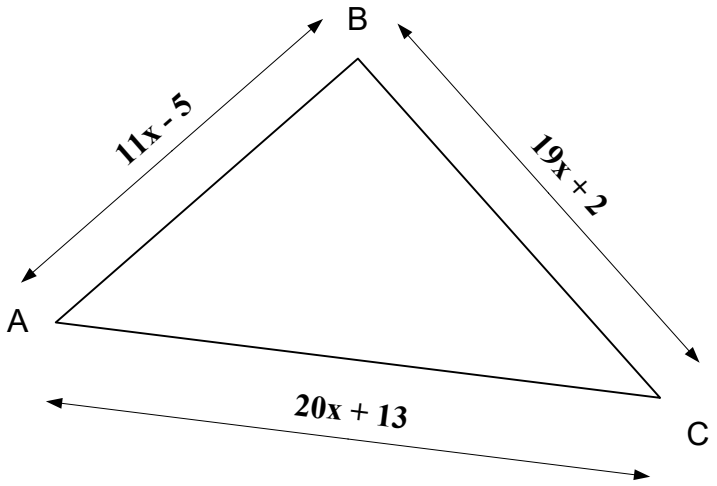
-3.84 3.2 3.29 -3.24 3.42 3.25 3.24624 3.24623 3.24

……

(1)

Q15 ABC is a triangle.

The perimeter of the triangle is 360 cm.



Show that ABC is a right-angled triangle.

(6)