SAMPLE PAPER 1
Level 1 Functional Skills Mathematics

Duration: 1 hour 20 minutes
Total marks: 45

SECTION 2 – CALCULATOR PERMITTED
VERSION 1.1

Candidate name (first, last)
First
Last

Candidate enrolment number
Date of birth (DDMMYYYY)

Assessment date (DDMMYYYY) Centre number Candidate signature and declaration*

• If you have used any additional answer sheets write the number of additional sheets in this box.
• Please ensure that you staple additional answer sheets to the back of this booklet, clearly labelling them with your full name, enrolment number, centre number and date in BLOCK CAPITALS.
• You must use a black or blue pen. You may use a pencil for charts and diagrams.

*I declare that I had no prior knowledge of the questions in this assessment and that I will not share information about the questions.

You should have the following for this assessment
• a pen with black or blue ink
• a pencil (for diagrams, graphs and charts only)
• an eraser
• a 30cm ruler
• a protractor.

You may use a calculator for Section 2.

General instructions
• Read through each question carefully.
• Show your working out (where required).
• Write all your working out and answers in this booklet.
• Check your calculations and check that your answers make sense.
• There are additional pages including graph paper at the back of this booklet if you run out of space or ask the invigilator if you need additional sheets of paper.
SECTION 2 – CALCULATOR PERMITTED

There are 45 marks available in this section.

You should check all your work as you go along.

You may use a calculator.
Q1
Write eight hundred and seven thousand, two hundred and five in figures.

____________________

(1 mark)

Q2
What is 2043.666666 rounded to 2 decimal places?

____________________

(1 mark)

Q3
Which one of these nets will fold to make a cube?

A  
B  
C  
D  

(tick one box)

(1 mark)
Q4

Which one of these fractions is the **biggest** number?

(tick one box)

- A \(\frac{4}{10}\)
- B \(\frac{3}{4}\)
- C \(\frac{2}{5}\)
- D \(\frac{1}{3}\)

(1 mark)

Q5

Which one of the following lists is in decreasing order from the largest to the smallest?

(tick one box)

- A 252,080 252,300 250,900
- B 252,080 250,900 252,300
- C 252,300 252,080 250,900
- D 252,300 250,900 252,080

(1 mark)
Q6 A customer wants to buy a sofa. The salesperson says he must pay a deposit.

You can pay 10%, that's £39.90
Or you can pay 20%, that's £49.90

Explain why the salesperson must have made a mistake.

Explanation

(1 mark)

Q7 A gardener needs to order fertiliser for a piece of land. The piece of land is a square with sides measuring 8 metres.

This formula shows how many grams of fertiliser she needs.

\[
\text{grams of fertiliser needed} = \text{length in metres} \times \text{width in metres} \times 25
\]

The supplier sells these bags of fertiliser.

1 kilogram 2 kilograms 5 kilograms 10 kilograms

Which bag of fertiliser should the gardener order? Include figures to explain your answer.

Show all your working.

Explanation

______________ kg bag

(3 marks)
Q8
A shelf stacker is making a display in a shop. It is made from six identical boxes. Each box is a cube.

Which one of the shapes below is a side view (elevation) of the display from side X?

Shape A  

Shape B  

Shape C  

Shape D  

Shape E  

Shape F  

The side view (elevation) from side X is Shape ______________

Each box has sides measuring 0.5m

Work out the area of this side of the display. Give units in your answer.

Show all your working.

Area ______________

Each box weighs 950g

What is the weight of the whole display in kilograms?

Show all your working.

_______________ kg

(4 marks)
A tourist wants to know how long it will take to walk to a museum. This map shows the route from a nearby station to the museum.

The route measures 6.5cm on the map.

It takes the tourist 10 minutes to walk a kilometre.

How long will it take him to walk to the museum from the station?

Give units in your answer.

Show all your working.

Amount of time to walk ____________

(4 marks)
Q10 A sales rep needs some cardboard boxes to store samples at work.

The office supplier has three different sized boxes.

<table>
<thead>
<tr>
<th>Box</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>35cm</td>
<td>35cm</td>
<td>55cm</td>
</tr>
<tr>
<td>B</td>
<td>40cm</td>
<td>40cm</td>
<td>40cm</td>
</tr>
<tr>
<td>C</td>
<td>30cm</td>
<td>60cm</td>
<td>30cm</td>
</tr>
</tbody>
</table>

Which box has the largest volume?

Explain your answer. Include figures to support your explanation.

Answer ___________________

Show all your working.

Explanation

(4 marks)
Q11 A carpet fitter needs to order some fixing strips to hold the carpet all around the edges of this floor.

He can cut and join fixing strips.

An online shop has packs of fixing strips on offer

**Carpet Supplies Direct**

Fixing strips: 6-metre packs
£7.99 per pack

*** Buy one get one free ***

Work out the total cost for the packs of fixing strips the carpet fitter needs to order.

Show all your working.

Total cost £_______________

(5 marks)
**Q12** A doctors’ receptionist wants to display a notice to show patients how long, on average, they will wait to see a doctor.

The receptionist recorded how long past their appointment time patients at the surgery waited to see their doctor yesterday morning.

<table>
<thead>
<tr>
<th>Minutes waiting (to the nearest minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

Complete the notice.

**Hilltop Surgery**

**Average waiting time**

You should expect to wait [ ] minutes to see a doctor today.

Explain why using the waiting times for yesterday morning might not give a suitable waiting time to put on the notice.

**Explanation**

(3 marks)
Q13 A customer needs to buy a washing machine. He wants to pay monthly.

Two different shops have the washing machine he wants.

BROWNS
Price £470
Pay monthly offer:
Interest is 15% of the price.
Pay the total amount in 10 equal monthly instalments. First instalment must be paid today.

HS
Home Superstore
Price £525
Pay monthly offer:
Interest is 5% of the price.
Pay 1/3 today and the rest in 4 equal monthly payments.

Work out which offer is cheaper and by how much. How much would the customer need to pay today?

Show all your working.

Shop_________ offer is cheaper by £__________________

Amount to pay today £_________________

(5 marks)
This table shows the number of orders a sales person got in six months.

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>150</td>
</tr>
<tr>
<td>February</td>
<td>155</td>
</tr>
<tr>
<td>March</td>
<td>170</td>
</tr>
<tr>
<td>April</td>
<td>160</td>
</tr>
<tr>
<td>May</td>
<td>180</td>
</tr>
<tr>
<td>June</td>
<td>200</td>
</tr>
</tbody>
</table>

Draw a line graph to show this information.

Explain what your graph shows about the number of orders.

Explanation
Q15 Your boss needs to go to a meeting in London on Sunday. He lives half an hour drive from Stockport station. He doesn’t want to leave home too early.

The meeting starts at 14:00. It is in a hotel a 15-minute walk from the station in London.

This is the train timetable for Sunday.

<table>
<thead>
<tr>
<th>Sundays</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester</td>
<td>0920</td>
<td>1020</td>
<td>1035</td>
<td>1115</td>
<td>1135</td>
</tr>
<tr>
<td>Stockport</td>
<td>0928</td>
<td>1029</td>
<td>1046</td>
<td>1124</td>
<td>1144</td>
</tr>
<tr>
<td>Stoke-on-Trent</td>
<td>1000</td>
<td>1100</td>
<td>1115</td>
<td>1152</td>
<td>1214</td>
</tr>
<tr>
<td>London</td>
<td>1206</td>
<td>1254</td>
<td>1257</td>
<td>1328</td>
<td>1347</td>
</tr>
</tbody>
</table>

The website also has information about ticket prices.

<table>
<thead>
<tr>
<th>Prices between Stockport and London</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket type</td>
<td>Off-peak (weekends)</td>
<td>Peak (any day)</td>
</tr>
<tr>
<td>Single (one way)</td>
<td>£44.55</td>
<td>£175.00</td>
</tr>
<tr>
<td>Return (two journeys)</td>
<td>£89.10</td>
<td>£242.00</td>
</tr>
</tbody>
</table>

Work out the best train for your boss to catch. Explain why you chose that train.

Space for working.

Train ____________________________

Explanation

Your boss will travel back on Monday

Work out the cheapest cost for your boss to travel to London and back.

Show all your working.

Cheapest cost £ ________________

(6 marks)

End of Section 2
Spare graph paper for Question 14