SAMPLE PAPER 1
Level 1 Functional Skills Mathematics

Duration: 25 minutes
Total marks: 15

SECTION 1 – CALCULATOR NOT 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*

*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 must NOT use a calculator for Section 1.

General instructions
- Read through each question carefully.
- Write all your answers in this booklet.
- Check your calculations and check that your answers make sense.
- You must hand this section in before you can pick up your calculator to begin Section 2.

Section 1 – CALCULATOR NOT PERMITTED

There are **15** marks available in this section.

You should check all your work as you go along.

You must **not** use a calculator in this section.

Q1

$4 + 3 \times 2 =$

_____

(1 mark)

Q2

$25^2 =$

_____

(1 mark)

Q3

What is $\frac{2}{5}$ as a decimal?

_____

(1 mark)

Q4

$-12 + 13 =$

(tick one box)

A	1	
B	-1	
C	25	
D	-25	

(1 mark)

Q5

60% of 300g is

(tick one box)

    A 18g ☐

    B 50g ☐

    C 180g ☐

    D 200g ☐

(1 mark)

Q6

155	125	145	95	150	155
125	99	100	178	95	180

What is the range of these numbers?

_____

(1 mark)

Q7 A man puts £3000 into a savings account.
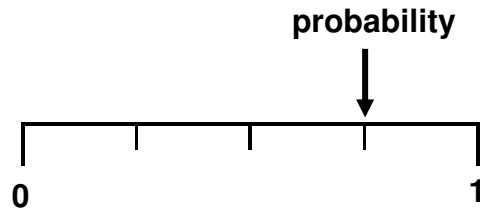The interest rate is 5% per year.

How much will the interest be for the first year?

£ _____

(1 mark)

Q8

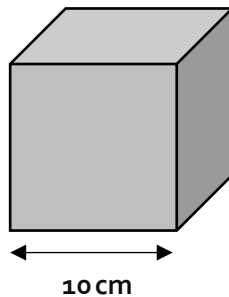This scale shows the probability that something will happen.

probability

0   1

What probability does the scale show?

(tick one box)

A   impossible ☐

B   certain ☐

C   unlikely ☐

D   likely ☐

(1 mark)

Q9

10 cm

What is the volume of this cube?

_____ cm³

(1 mark)

Q10

$5\frac{2}{5}$ is the same as

$$\frac{\boxed{}}{5}$$

(1 mark)

Q11 A customer wants to buy a coat in the sale in a clothes shop. He has £30.

SALE
All coats
Reduced to **70%**
of the ticket price

£45

Can the customer afford to buy the coat?

Yes or No _____

Show how you got your answer.

(2 marks)

Q12 A sandwich shop owner makes 1 sandwich with brown bread for every 4 sandwiches he makes with white bread.

Today he needs to make 600 sandwiches altogether.

How many sandwiches should he make with brown bread today?

_____ **sandwiches**

(1 mark)

Q13 Jon is a checkout assistant in a supermarket.

There are 5 tills and 5 assistants. The supervisor allocates the tills to the assistants randomly at the start of each day.

No one likes the till next to the door.

> What is the probability that Jon will get the till next to the door today?
> Give your answer as a fraction in its simplest form.

$$\frac{\boxed{}}{\boxed{}}$$

(1 mark)

Q14 A van has a fuel tank that holds 60 litres when full.

This diagram shows the fuel gauge on the van.

Empty   Full

> **Approximately** how many litres of fuel are left in the tank? **Give your answer in whole litres.**

_____ **litres**

(1 mark)

End of Section 1.
When you have finished you MUST hand this booklet in to the invigilator
before you can pick up your calculator to start Section 2.

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.

_____
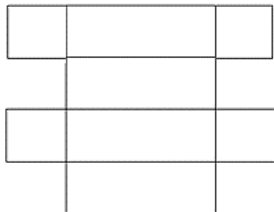
(1 mark)

Q2

What is 2 043.666666 rounded to 2 decimal places?

_____

(1 mark)

Q3

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

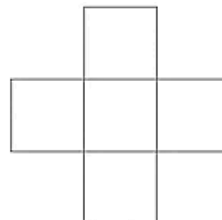| A	B	C	D

(tick one box)
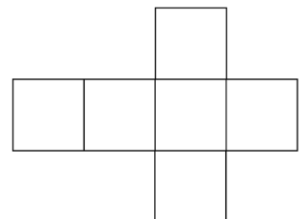
☐   ☐   ☐   ☐
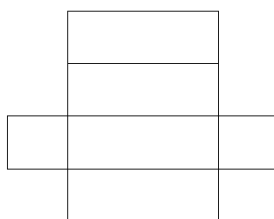
(1 mark)

Q4

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

(tick one box)

☐   A $\dfrac{4}{10}$

☐   B $\dfrac{3}{4}$

☐   C $\dfrac{2}{5}$

☐   D $\dfrac{1}{3}$

(1 mark)

Q5

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

(tick one box)

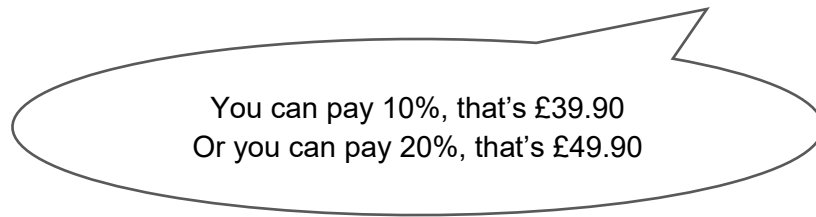A   252,080   252,300   250,900   ☐

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.

grams of fertiliser needed = length in metres x width in metres x 25

The supplier sells these bags of fertiliser.

1kg
2kg
5kg
10k

1 kilogram   2 kilograms   5 kilograms   10 kilograms

Which bag of fertiliser should the gardener order? Include figures to explain your answer.
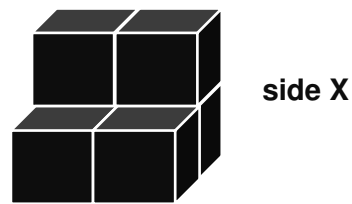
Show all your working.
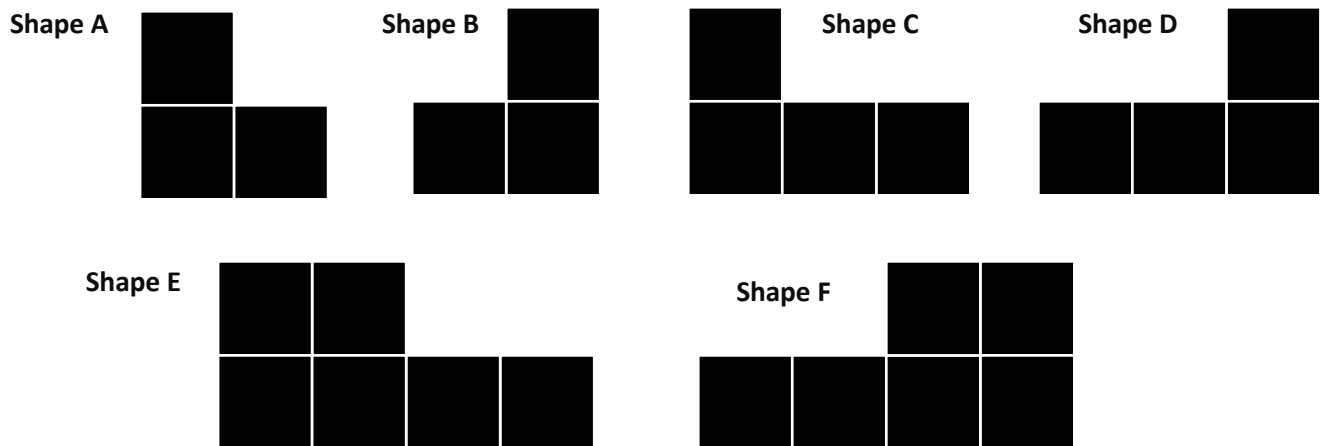
_____ **kg bag**

Explanation

(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.

side X

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.**
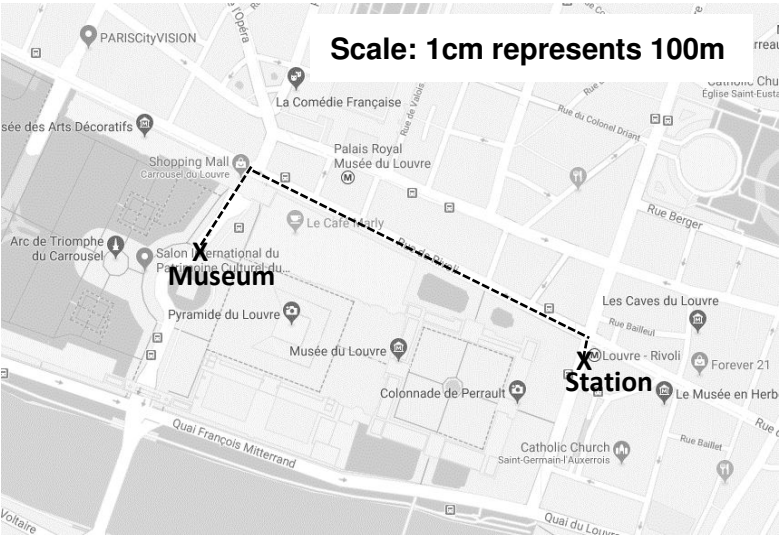
Show all your working.

Area _____

Each box weighs 950g

What is the weight of the whole display in **kilograms**?

Show all your working.

_____**kg**

(4 marks)

Q9 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?
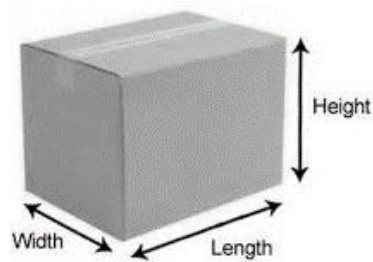**Give units in your answer.**

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.

Box	Width	Length	Height
A	35cm	35cm	55cm
B	40cm	40cm	40cm
C	30cm	60cm	30cm

Which box has the largest volume?

Explain your answer. Include figures to support your explanation.
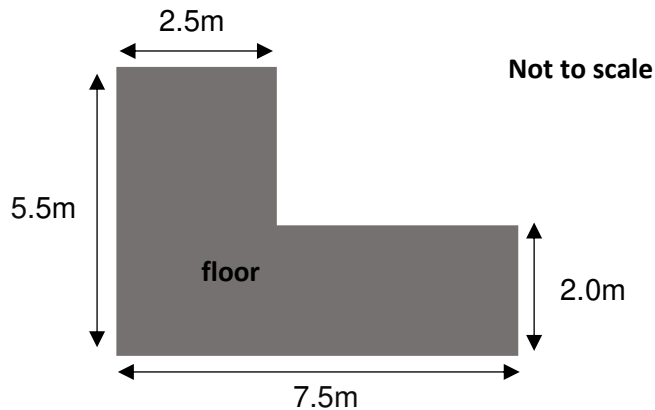
Answer _____

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.

2.5m

Not to scale

5.5m

floor

2.0m

7.5m

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.

Minutes waiting (to the nearest minute)		
4	8	6
4	5	3
10	7	5
9	7	4

Complete the notice.

Show all your working.

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?

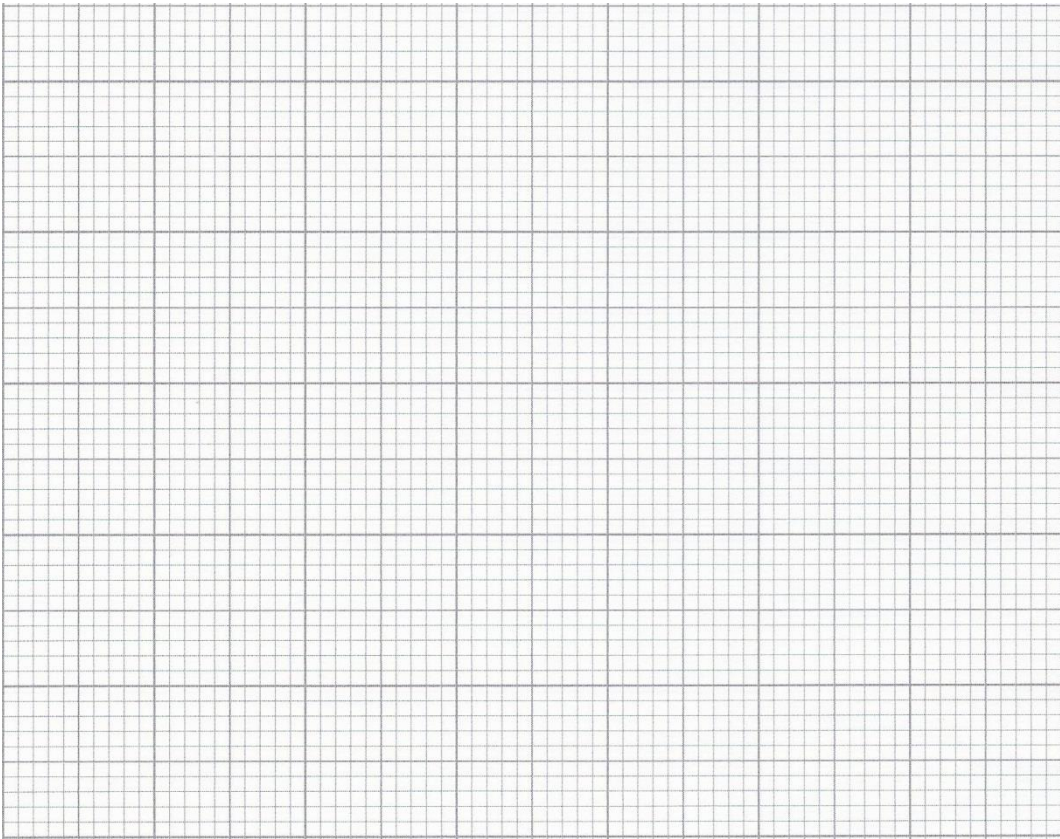Show all your working.

Shop_____ offer is cheaper by £_____

Amount to pay today £_____

(5 marks)

Q14 This table shows the number of orders a sales person got in six months.

Month	Number of orders
January	150
February	155
March	170
April	160
May	180
June	200

Draw a line graph to show this information.

Explain what your graph shows about the number of orders.

Explanation

(5 marks)

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.

Sundays						
Manchester	0920	1020	1035	1115	1135	1155
Stockport	0928	1029	1046	1124	1144	1205
Stoke-on-Trent	1000	1100	1115	1152	1214	1235
London	1206	1254	1257	1328	1347	1410

The website also has information about ticket prices.

Prices between Stockport and London		
Ticket type	**Off-peak (weekends)**	**Peak (any day)**
Single (one way)	£44.55	£175.00
Return (two journeys)	£89.10	£242.00

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

Show your 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 your working.

Cheapest cost £ _____

(6 marks)

End of Section 2

Spare graph paper for Question 14