Highfield Qualifications®

Level 1

Paper Code: FSQC109P

MOCK Highfield Functional Skills Qualification in Mathematics at Level 1

Information for centres and learners

- **Learners taking this examination must also complete papercode FSQN109P.**
- **Only remove the examination paper from the sealed envelope when instructed to do so.**
- **Under no circumstances should you use an unsealed examination paper.**
- Complete **ALL** questions.
- Use **BLACK** or **BLUE** ink.
- You are **NOT** allowed any assistance to complete the answers. You **MAY** however use a **CALCULATOR**.
- Marks are awarded for **SHOWING** your **WORKING OUT**.
- Use a **PENCIL**, **ERASER**, **RULER** and **PROTRACTOR** (as necessary) when drawing diagrams and charts.
- **SIGN** the declaration before leaving.

The duration of this examination is **1 HOUR 50 MINUTES**. The examination consists of **15 QUESTIONS** and is worth **45 MARKS**.

Complete the following

Calculator Test

First Name *(in full)* | Middle initial

Last Name

Date of Birth *(8 digits)* — D D M M Y Y Y Y

Highfield Learner ID

Approved Centre Number *(5 digits)* | **Nominated Tutor Number** *(5 digits)*

Examination Date *(8 digits)* — D D M M Y Y Y Y | **Is this a resit examination?** YES NO

Examination Start Time *(24 hour clock)* — H H M M | **Examination Finish Time** *(24 hour clock)* — H H M M

Learner declaration

Learner signature: ....

I confirm:
- I removed the examination paper from the sealed envelope.
- I received no help in answering the questions in this examination paper.
- I am the person stated above on this form.
- I will not discuss the content of the examination with anyone else.

We listen and respond

1

$$R = \frac{2t}{s}$$

Calculate the value of R when t = 8.5 and s = 5

Write the answer in the box below.

(1 mark)

Answer: _____

2

Work out 22 ÷ 1000

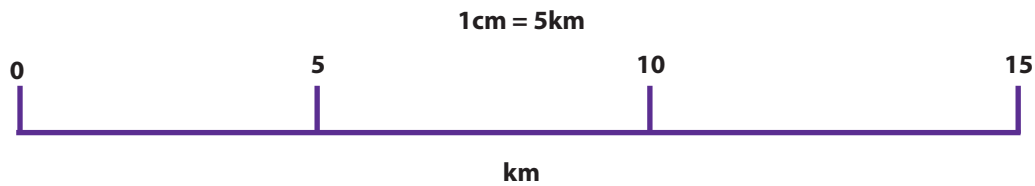Write your answer correct to 3 decimal places in the box below.

(1 mark)

Answer: _____

3

You are using a map with the following information displayed:

1cm = 5km

0   5   10   15

km

On the map 2 cities are 25cm apart.

What is the actual distance between the 2 cities?

Show your working out and write the answer in the box below.   *(2 marks)*

Answer: _____km

4

Draw the lines of symmetry on this equilateral triangle.

(1 mark)
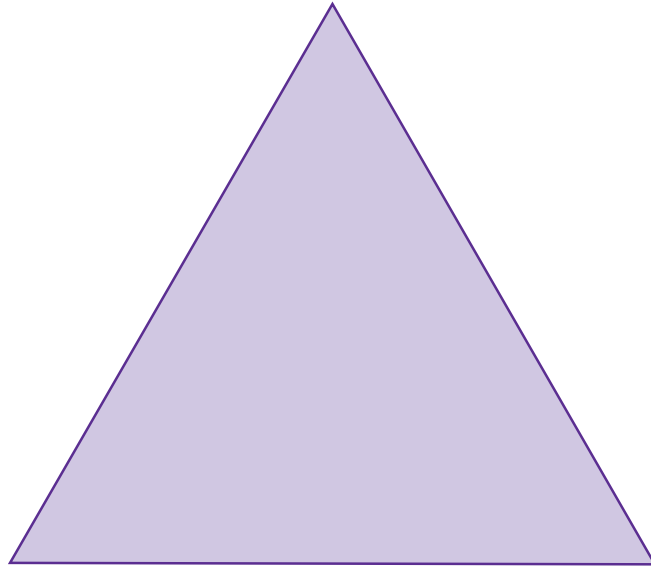
5

Calculate $\dfrac{3}{4}$ of 300.

Show your working out and write the answer in the box below.

(2 marks)

Answer: _____

6

Calculate 2.002 × 0.9

Write the answer in the box below.

(1 mark)

Answer: _____

7

Jack and Billy share £210 in the ratio 1:5.

How much does Billy get?

Show your working out and write the answer in the box below.

(2 marks)

Answer: £_____

8

Show how you could check your answer to question 7.

Show your working out and write the answer in the box below.
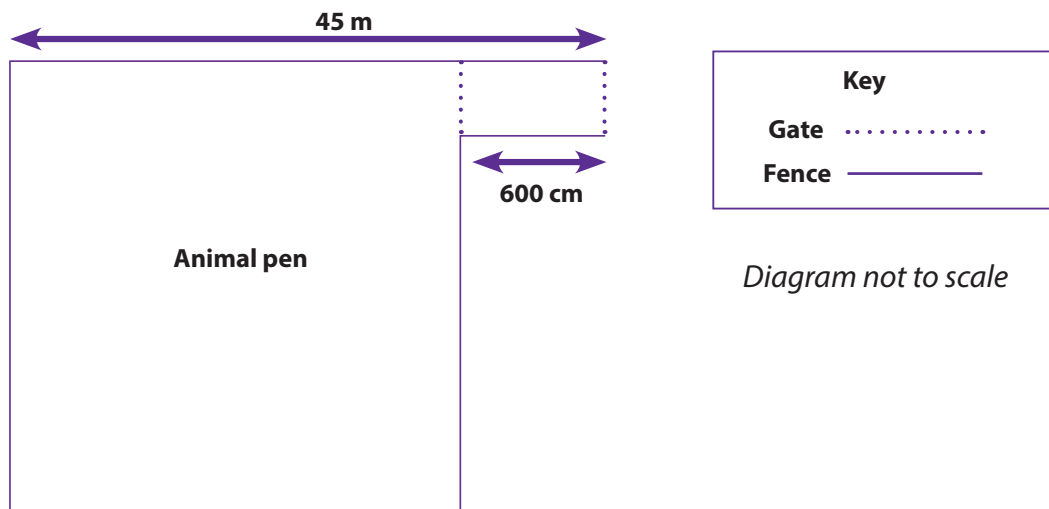
(1 mark)

Scenario A
Highfield Country Show

9

You are helping at the Highfield Country Show.

The showground needs a fence to be put up around an animal pen.

The animal pen is made up of a square, with a rectangle added on with gates.

45 m

Animal pen

600 cm

Key	
Gate	· · · · · · · · · ·
Fence	————

Diagram not to scale

The gates are 300 cm wide.

Each fence panel is 1.5m long.

How many fence panels will you need?

Show your working out and write the answer in the box below.

(5 marks)

Answer: _____

10

A stall has a prize for the person who can correctly guess the weight of a pig to the nearest kg.

These are the names of the people with their guess in kg.

Jan	Pete	Kevin	Balil	Juniper
208	618	309	863	267
Adele	Simon	Jess	Manjit	Oliver
653	455	329	487	732
Lee	Arthur	Cameron	Harry	Theresa
375	428	165	296	340

The correct weight of the pig is **20 kg more** than the **mean** of all the guesses.

Who won the prize?

Show your working out and write the answer in the box below

(3 marks)

Answer: _____

11

Another stall has a wheel on a stand.

The wheel is divided into 32 equal sectors.

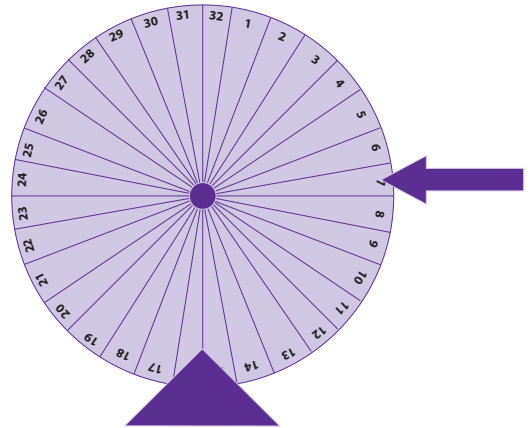The pointer is spun and has an equal chance of landing on any sector.

Each sector is numbered 1 - 32.

If the pointer stops on a multiple of 5, you win a prize.

What is the probability that you will win a prize with one spin?

Give your answer as a fraction in its simplest form.

Show your working out and write the answer in the box below.

(3 marks)

Answer: _____

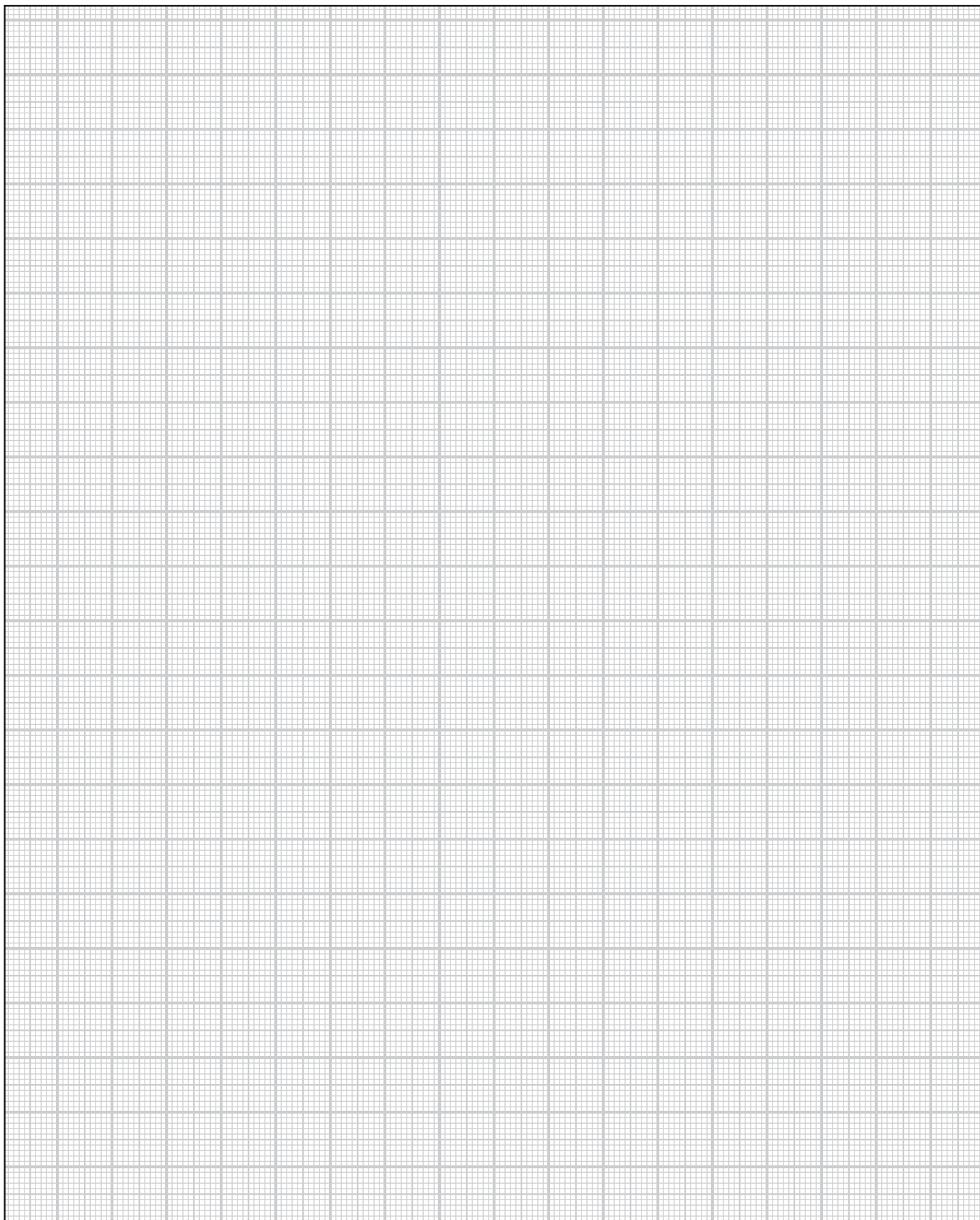**12**

This is the 6th year that the show has taken place.

The table below shows the attendance figures at the show for the last 5 years.

Year	Attendance
1	3200
2	3700
3	4150
4	1950
5	4500
6	

In year 6 the attendance is 15% greater than year 5.

Show your working out and draw a chart to show the attendance for the 6 years.

(6 marks)

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Scenario B
Highfield Landscaping

13

You are working for Highfield Landscape Gardeners.

The owner has asked you to calculate the price of a project for a customer.

The customer has a budget of £6,000

The project will need:

- materials costing £990

- 2 gardeners and 1 labourer for 12 days of work (09:00 – 17:00)

The gardeners are each paid £159.99 per day.
The labourer is paid £8.25 per hour.

Add 20% to the total for VAT.

Can the project be completed within the budget?

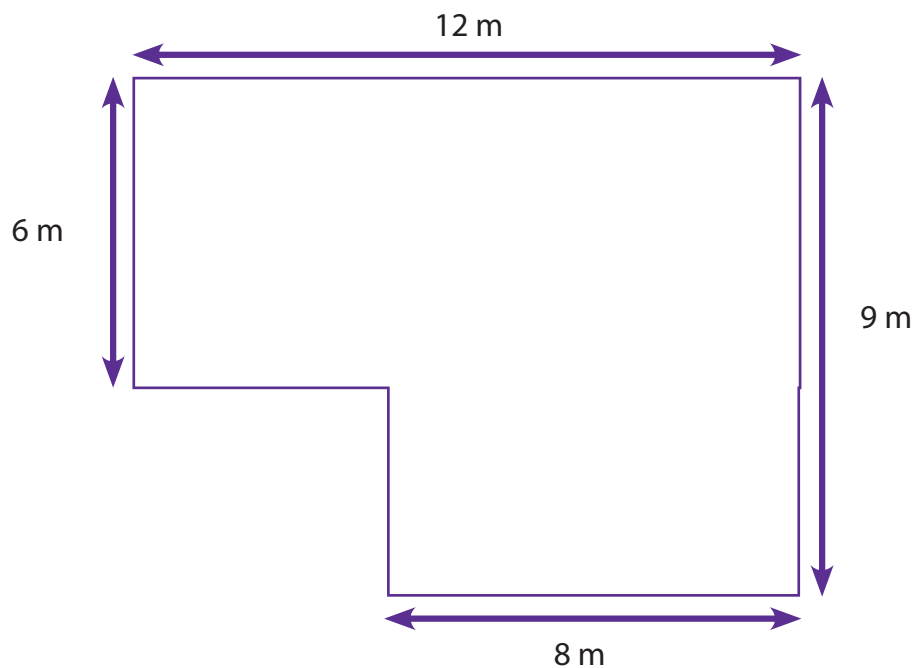Show your working out and write the answer in the box below. *(6 marks)*

Answer: _____

14

A customer wants their garden planted with grass seed.

They give you this plan of the garden.

Grass Seed

Use 35g per m2

1kg

How many boxes of grass seed will you need to buy?

Show your working out and write the answer in the box below.   *(6 marks)*
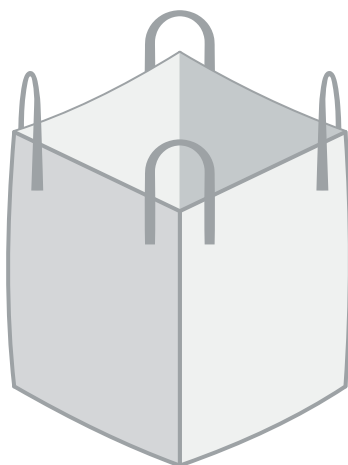
Answer: _____

15

A playground needs woodchips to be laid under the swings for safety.

The area of the swings measures 13 metres long and 5 metres wide.

The woodchips need to be 10cm deep.

The woodchips are delivered in the following bags which hold 1m³ of woodchips and costs £99. Only full bags can be bought.

What is the total cost of the woodchips needed?

Show your working out and write the answer in the box below.

(5 marks)

Answer: £ _____

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Highfield EXAMINATION

Highfield
Qualifications®

Level 1

Mathematics

We listen and respond