

Paper Code: FSQC110P

Highfield Functional Skills Qualification in Mathematics at Level 1



Information for centres and learners

- Learners taking this examination must also complete papercode FSQN110P
- 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 14 QUESTIONS and is worth 45 MARKS.

Complete the fol	lowing	9															
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)					 omi i digits		ed To	utor	· Nu	mb	er						
Examination Date (8 digits)	D	D	M	M	Y	Y	Y	Y			is a mina		-	YES		N	0
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We listen and respond

Learner

signature:

I will not discuss the content of the

examination with anyone else.



1

$$K = \frac{4y}{x}$$

Calculate the value of K when y = 17.4 and x = 12

Write the answer in the box below.	(1 mark)
	Answer:

2

Work out 783.48 ÷ 100.

Write your answer correct to <u>3 decimal places</u> in the box below.

(1 mark)

	Answer:

3

You are using a map with the following information displayed:



2 inches = 10 miles

On the map, your home is 7 inches away from your workplace.

What is the actual distance between your home and your workplace?

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

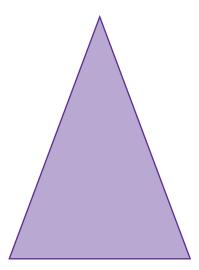
(2 marks)

Answer: _____ miles

4

Draw the line(s) of symmetry on this isosceles triangle.

(1 mark)





Answer: _____

5

Calculate $\frac{7}{12}$ of 1,080km

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

6

Calculate 7.26 ÷ 24.2

Write the answer in the box below.	(1 mark)
Answer:	



7

There are six hundred thousand people living in Coventry and Wolverhampton combined.

The populations are split in the ratio 7:5.

How many people live in Wolverhampton?

Show your working out and write the answer in the box below.	(3 marks
Answei	r:



Scenario A

Highfield Castle



You work at Highfield Castle.

As part of your job, you walk round the perimeter of the castle to perform security checks.

Below is a diagram of the castle. The main section and each of the turrets are squares.

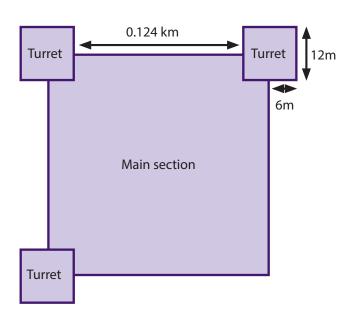


Diagram not to scale

How far do you walk on each security check? Give your answer in metres.

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

(5 marks)

	\neg
Answer:	m



9

You are moving some swords into a new display.

Below are the weights of the swords, in kg.

1.3	2.1	1.7	2.4
0.9	1.3	1.5	1.9
1.1	1.3	2.1	2.2

What is the mean and the range of the weights of the swords?	
Show your working out and write the answers in the box below.	(4 marks)
Manual Parana	
Mean: Range:	
10	
You pick up 1 of the swords at random.	
What is the probability that you pick up a sword that weighs more than 2kg? Give your answer as a fraction in its simplest form.	
Show your working out and write the answer in the box below.	(2 marks)

Answer: ____



11

The table below shows the number of visitors to Highfield Castle last week.

Day	Number of visitors
Monday	165
Tuesday	195
Wednesday	135
Thursday	150
Friday	

On Friday there were 20% more visitors than there were on Thursday.

Show your working out and then draw a chart on the graph paper to show the number of visitors during each day last week.				
risitors during each day last week.	(6 mark			

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(6 marks)

Scenario B

Highfield Roofing

12

You are working for Highfield Roofing.

Your manager has asked you to calculate the price of a job.

The customer has a budget of £1,000.

The project will need:

- materials costing £426.93
- 1 roofer and 1 apprentice for 3 days of work (08:30 17:30)

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

The roofer is paid £84.50 per day.

The apprentice is paid £4.75 per hour.

Add 20% to the total cost of the job for VAT.

Can the project be completed within the budget?

Answer:



(5 marks)

13

You use a lot of water while working.

You are buying some new containers to hold the water that you use.



The containers are cuboid. They have a base of 32cm x 21cm and are 0.5m tall.

You need enough containers to hold at least 100,000cm³ of water.

Each container costs £6.99

How much will it cost to buy the containers that you need?

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

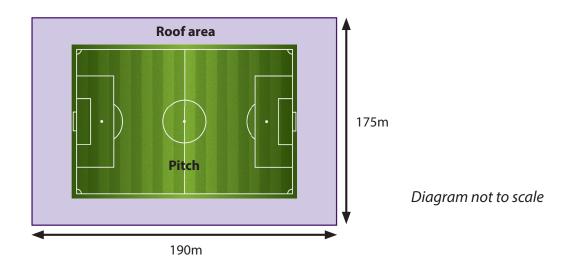
Answer: £	



14

You are hired for another job to build the roof on a new football stadium.

They give you this plan of the stadium.



The pitch dimensions are 105m x 70m.

The roof will be made up of panels that are 50cm x 50cm.

How many panels will be needed for the entire roof?

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

Answer:	panels

END OF ASSESSMENT



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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
Mark(s) available	1	1	2	1	2	1	3	5	4	2	6	6	5	6	45
Marker															
2nd line marker															

Marker:	4	2nd line marker:	<u> </u>		
Date:		Date:			



Mathematics

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