TQUK Functional Skills Qualification in Maths at Level 1

Examination Past Paper 8

Please complete the details below using black or blue ink. Use BLOCK CAPITALS.

Learner Name: _____

Learner Number: _____

Date: _____

Centre Name: _____

Instructions:
- read each question **carefully**
- answer **all** questions
- write your answers **clearly** in the spaces provided
- **check** your answers.

Information:
- this examination has **two** sections. These are clearly labelled
- you are **not allowed** to use a calculator for Section A
- you **are allowed** to use a calculator for Section B
- the **maximum** mark for this examination is 60
- the marks available for each question are shown in **bold** beneath each question.

Items:
- you **will need** a pen with black or blue ink, a pencil, a ruler and an eraser (for diagrams, graphs and charts only)
- you **will need** a basic calculator for Section B only
- you **will need** a protractor
- you **will not** need any other stationery or equipment.

Time allowed:
30 minutes for Section A (Non-calculator)
90 minutes for Section B (Calculator)

Do not open this examination paper until you are told to do so.

For examiner use only

	Marks available	Marks awarded	Second marks
Section A	15		
Section B	45		
Total marks	60		

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Section A: Non-calculator

There are **15 marks** available in this section.
You must **not** use a calculator in this section.
You will have **30 minutes** to complete this section.

1. What type of angle is 45°?

a) Reflex	**b)** Obtuse
c) Right	**d)** Acute

Answer	

[1]

2. Work out 2.55 ÷ 5

Answer	

[1]

3. Work out 56 ÷ 1000

Answer	

[1]

Questions continue on the following page

4. Work out 0.34 × 10

	Answer	

[1]

5. This is a fair spinner:
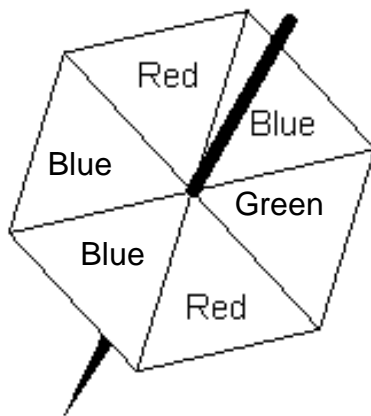
The spinner is spun once.

What is the probability that the spinner will land on red?

Give your answer as a fraction.

	Answer	

[1]

6. Write these numbers in order starting with the lowest:

3.201   3.24   3.157   3.19   3.212

Show any working here:					
Answer					
	Lowest	⟶			**Highest**

[1]

7. Convert £14.50 into pence.

Answer	**pence**

[2]

Questions continue on the following page

8. Shubham has 5 attempts at a computer game.

The score Shubham achieved each time is shown:

Attempt 1	Attempt 2	Attempt 3	Attempt 4	Attempt 5
3000	3200	3850	4280	3220

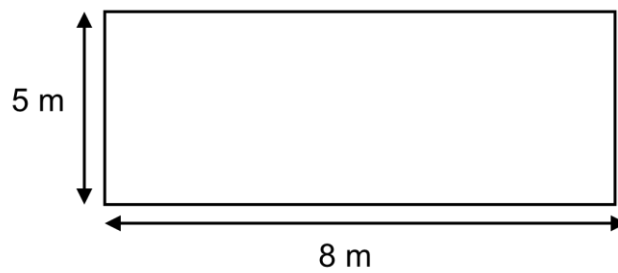Shubham thinks the mean score per attempt is more than 3500

Is Shubham correct?

Show how you decide.

	Answer	

[3]

9.   Devin wants to put artificial grass in this garden shown:

5 m

8 m

Not drawn to scale

The cost of artificial grass is £100 for every 4 square metres (m^2).

How much will it cost to cover the entire garden?

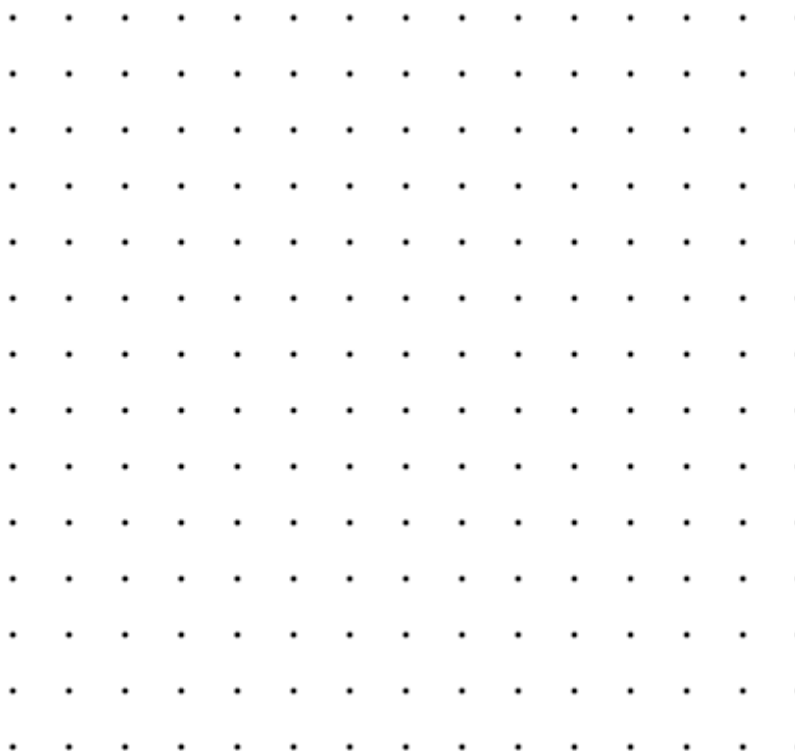| **Answer**	£

[4]

End of Section A.

Section B begins on Page 7.

Section B: Calculator

There are **45 marks** available in this section.
You **can** use a basic calculator in this section.
You will have **90 minutes** to complete this section.

1. Draw a hexagon.

[1]

2. How many grams (g) are there in 3.5 kilograms (kg)?

	Answer	grams

[1]

Questions continue on the following page

3. Quinn checks the weather app on a mobile phone:

- The probability that it will snow on Wednesday is $\dfrac{1}{10}$

- The probability that it will snow on Thursday is $\dfrac{3}{25}$

On which day is it more likely to snow?

Show how you decide.

	Answer	

[2]

4. Write this fraction:

$\dfrac{3}{5}$

a) as a decimal

b) as a percentage.

Answer	**a) Decimal:**	**b) Percentage:**

[2]

5. Kai has these instructions for making a cake.

Preparation time: 1 and $\frac{1}{3}$ hours

Baking time: 2 and $\frac{3}{4}$ hours

Estimate how long it takes in total to make the cake.

Show your working.

	Answer

[2]

6. Decrease 200 by 5%

	Answer

[2]

Questions continue on the following page

7. Kaja goes out for a 12 kilometre (km) run every day.

The route Kaja takes is equal in scale to 15 centimetres on a map.

Kaja wants to increase the run to 18 kilometres.

What length will this run be on the map?

| **Answer** | **cm** |

[2]

8. Sam put £900 into a new savings account.

The new savings account pays 10% simple interest per year.

After 2 years Sam decides to buy a bike.

The bike costs £1050

Does Sam have enough money in the savings account to buy the bike?

Show how you decide.
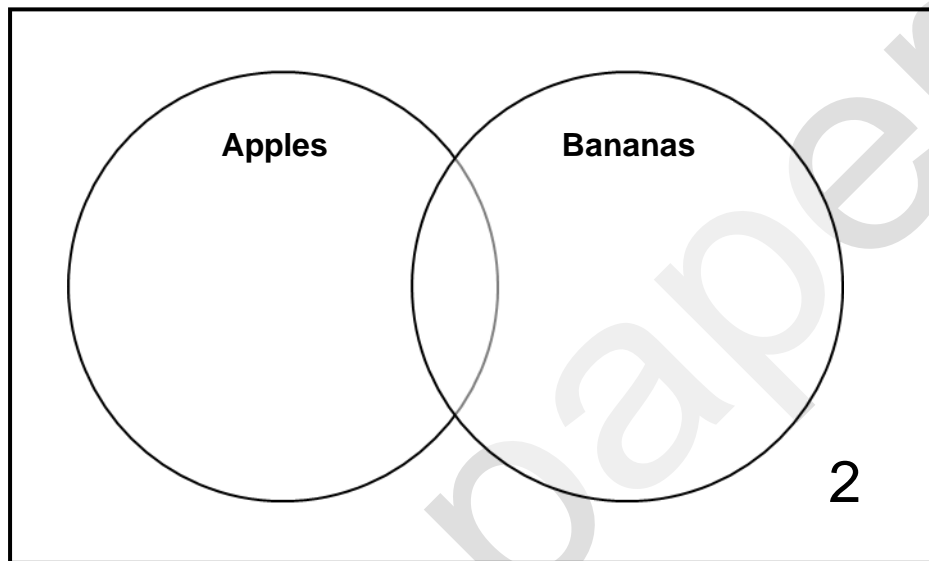
	Answer	

[3]

Questions continue on the following page

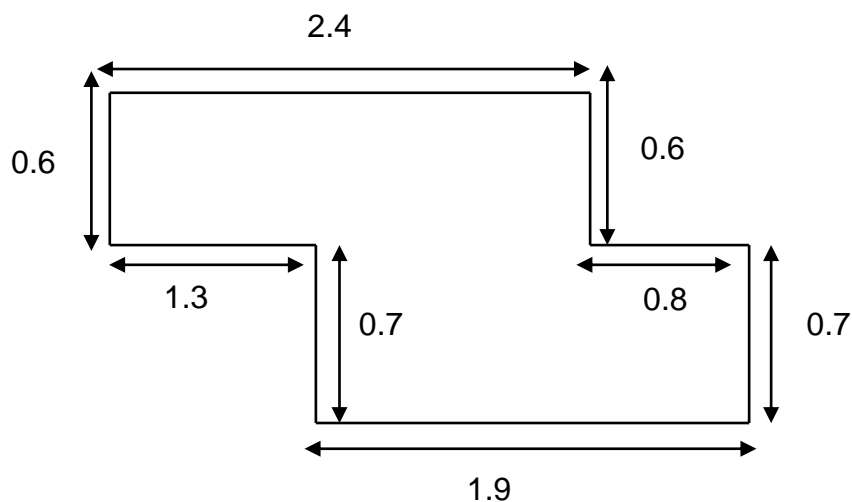**9.** A teacher asked 20 students if they liked apples or bananas:

- $\frac{1}{4}$ of the total number of students said they liked both apples and bananas
- 15 students in total said they liked apples
- 2 students said they liked neither apples nor bananas.

Use this information to complete the Venn diagram:

[3]

10. Ali wants to put a fence **around** this garden:

2.4

Not drawn to scale

0.6

0.6

Measurements given in metres (m)

1.3

0.8

0.7

0.7

1.9

Fence panels are sold in 1.6 metre (m) lengths.

The fence panels can be cut to size once they are bought.
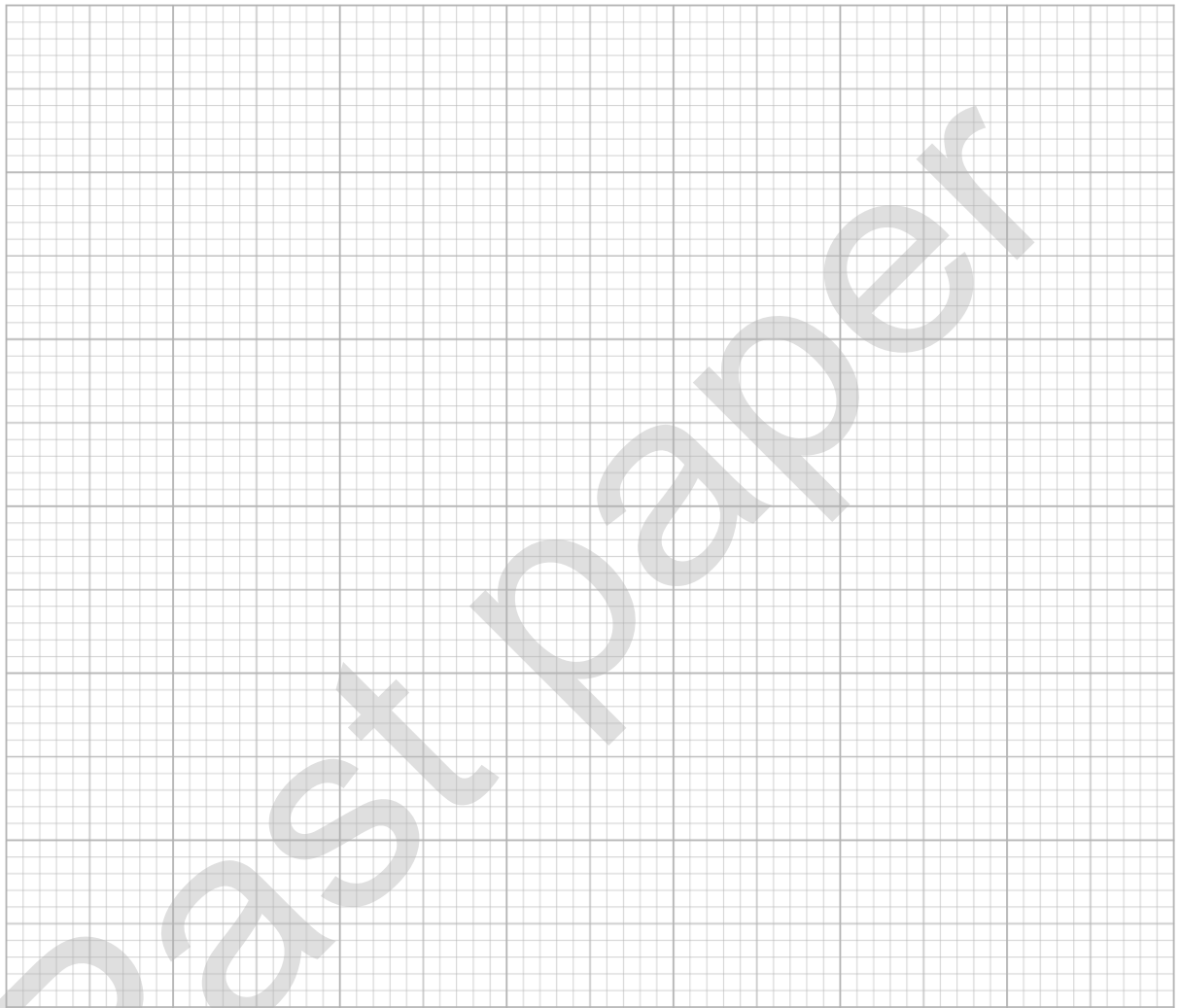
How many fence panels will Ali need to buy?

Answer

[4]

Questions continue on the following page

11. The table shows how much profit Sade made each day last week:

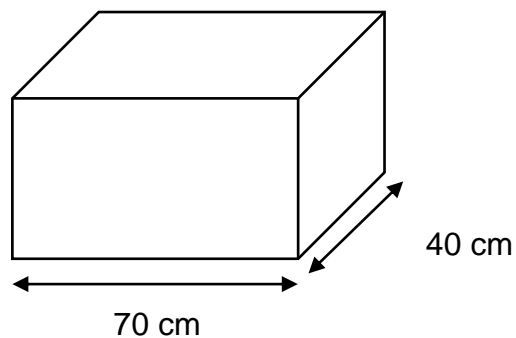| Monday	Tuesday	Wednesday	Thursday	Friday
£1000	£2800	£1400	£3000	£4500

Sade wants to record this information in a line graph.

Use this information to create a line graph for Sade.

[4]

12. Jackie needs to fill this tank with water to a height of 36 centimetres (cm).

Not drawn to scale

40 cm

70 cm

Jackie has a bucket that holds 5000 cubic centimetres (cm^3) of water.

What is the **minimum** number of times Jackie will need to use the bucket to fill the tank?

Answer

[4]

Questions continue on the following page

13. Shaq wants to invest £1000 in a bank for two years.

There are these two options:

Bank A:	**Bank B:**
5% interest per year	$\frac{1}{8}$ of the money invested added to the total after 2 years

Shaq wants to invest with the bank which will give the most money back after two years.

Which bank should Shaq choose?

Show how you decide.

Answer

[5]

14. 80 students are going on a school trip.

The ratio of junior to senior students is 1 : 3

- 30% of the junior students want to go rock climbing

- 45% of the senior students want to go rock climbing

- The rest will go sailing.

Use this information to complete the table:

|	Rock climbing	Sailing	Total
Junior students			
Senior students			
Total			

Show any workings here.

[5]

Questions continue on the following page

15. Charlie needs to work out what time to leave home to walk to work.

Charlie:

- can walk at average speed of 4 kilometres per hour

- will need to walk 3000 metres (m) to work

- must arrive at work by 8:30 am.

Charlie uses this rule to work out how long the walk will take:

| Distance in kilometres (km) | ➡ | Divided by average walking speed | ➡ | Time in hours |
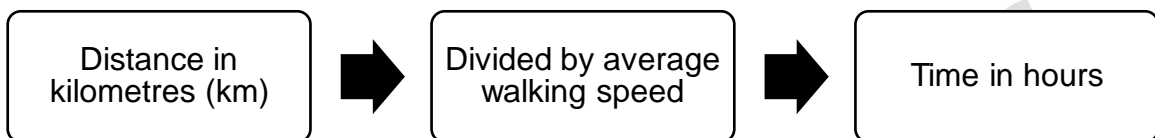
Charlie thinks the latest time to leave home will be 7:15 am.

Is Charlie correct?

Show how you decide.

| | **Answer** | |

[5]

This is the end of the assessment.