TQUK Functional Skills Qualification in Maths at Level 2

Examination Past Paper 3

Please complete the details below using black or blue ink. Use BLOCK CAPITALS.		
Learner Name:		
Learner Number:		
Date:		
Centre Name:		

Training QualificationsUK

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 basic 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 and a compass
- 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. Work out 0.238 + 0.05

	Answer	
		[1]
2.	Work out 0.8 × 0.222	
	Answer	
		[1]
	Questions continue on the following page	

3. A company has 200 employees and 2 offices.

Employees are split across both offices as shown in the table below:

	Office A	Office B
Part-time employees	64	48
Full-time employees	16	72

One person is chosen at random.

What is the probability that the person chosen works full time in office B?

Give your answer as a percentage.

Answer	%

[2]

4. Round 39.4528 to the nearest whole number.

Use your rounded number to estimate the answer to 39.4528 × 2

Show your working.



[2]

5. Idris sees this mobile phone in a sale:

Mobile phone	
Was £95.00	
Now 12% off	

How much money will Idris save buying the phone in the sale?



7. Work out:

$$5\frac{1}{3}+4\frac{1}{5}$$

Give your answer as a mixed number.



Section B begins on Page 6.



[1]

3. Ezra is going to put a shed in a garden.

The shed is in the shape of a square.

The coordinate grid shows where two corners and one edge of the square will go.



What are the possible coordinates for the other two corners of the square?



4. A circle is divided into 8 equal sections as show below:



5. Write this fraction:

29 40

- (a) as a decimal
- (b) as a percentage.

Answer (a) De	ecimal:	(b) Percentage:
		[2]

Questions continue on the following page

6. Charlie wants to build a pond in a garden.

The pond needs to be a rectangle with:

- a length of 2 metres and a width of 1 metre
- at least 1 metre away from the house.

Draw a possible position for the pond on the scale diagram below:



7. Last year 825 500 people visited a museum.

The manager is set a target to increase the number of visitors by 22%.

The manager thinks this will be more than 1 005 000 visitors.

Is the manager correct?

Show how you decide.

[3]
Questions continue on the following page	

8. Leslie needs to put a fence around a pond.

The pond is in the shape of a circle with a diameter of 4.26 meters.

Leslie buys 13.5 metres of fencing.

Has Leslie bought enough fencing?

Show how you decide.

Use $\pi = 3.14$

	Answer	[3]
	>	
00		

9. Taylor books a holiday.

The next day, their friend books the same holiday for $\pounds 690$ after receiving a 4% discount.

How much more did Taylor pay for the holiday?

Answer £	[3]
Questions continue on the following page	

10. Chen sells cakes.

The table below shows the ingredients in one cake:

Ingredient	Grams
Flour	275
Sugar	200
Baking powder	5

A customer wants to know what fraction of the cake is sugar.

Chen tells the customer $\frac{7}{12}$

Is this correct?

Show how you decide.

 $\mathbf{2}$

Answer

[3]

11. Lee wants to paint the front face and top face of this cuboid as part of an art project:

28 cm Front face 54 cm	32 cm	Not drawn to scale	
Lee will paint yellow, green and white str	ipes in the	ratio 5 : 3 : 2	
How much of the cuboid will be painted y	vellow?		
Give your answer in square centimetres	(cm²).		
	Answer	cm ²	

[4]

Questions continue on the following page

12. Harper is planning a road trip with this information:

- the total distance is 1600 kilometres
- Harper only wants to drive a maximum of 225 **miles** each day.

How many whole days will Harper need to complete the 1600 km?

Use this graph to convert between kilometres and miles.



Conversion Graph

13. Over a period of six weeks, Jamie sold chocolate cupcakes and lemon cupcakes.

The number of chocolate cupcakes Jamie sold each week is shown below:

Number of chocolate cupcakes sold					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
91	85	64	68	100	72

The number of lemon cupcakes Jamie sold is summarised below:

Lemon cupcakes sold			
Mean number sold per week	84		
Range	20		

Jamie claims:

- a) "On average, I have sold more chocolate cupcakes per week"
- b) "The chocolate cupcake sales are more consistent".

Are both of Jamie's claims correct?

Give reasons for your ans	wers.
Show working here:	

Reason - claim a):

Reason - claim b):

[4]

Questions continue on the following page

14. Ali is setting up a saltwater fish tank.

The fish tank is in the shape of a cylinder.



Not drawn to scale

Ali uses this formula to work out how many grams of salt to add to the tank:

Amount of salt in grams =	volume of tank	multiplied by 35
	1000	

Ali thinks the tank will need more than 3.75 kilograms of salt.

Is Ali correct?

Show how you decide.

Δ.

Use $\pi = 3.14$

Answer

15. Riley wants to estimate how much it will cost to lay a patio in the garden below:



Riley finds these prices online:

Price per square metre (m ²)					
£85	£100	£75	£130	£150	£135

Riley uses the median price to estimate how much it will cost to lay the patio.

Use:	←	a		
Area = $\frac{(a+b)h}{2}$		\uparrow		
2		h 🔪		
	+	b		
Show your working.				

How much does Riley estimate the patio will cost?

Answer box is on the next page



This is the end of the assessment.