

Functional Skills

Mathematics

Level 2



Sample
Assessment
Materials

Functional Skills qualifications
First teaching September 2019

Edexcel, BTEC and LCCI qualifications

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ISBN 978 1 446 96314 2

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Marking Guidance for Functional Skills Mathematics Level 1 and 2

General

1. All learners must receive the same treatment. Examiners must mark the first learner in exactly the same way as they mark the last.
2. Where some judgement is required, mark schemes will provide the principles by which marks will be awarded; exemplification will not be exhaustive. When examiners are in doubt regarding the application of the mark scheme, the response should be escalated to a senior examiner to review.
3. Mark schemes should be applied positively. Learners must be rewarded for what they have shown they can do rather than penalised for omissions.
4. All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the learner's response is not worthy of credit according to the mark scheme. If there is a wrong answer (or no answer) indicated in the answer box, always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.
5. Working is always expected. For short questions where working may not be seen, correct answers may still be awarded full marks. For longer questions, an answer in brackets from the mark scheme seen in the body of the working, implies a correct process and the appropriate marks may be awarded.
6. **Questions that specifically state that working is required:** learners who do not show working will get no marks – full details will be given in the mark scheme for each individual question.

Applying the Mark Scheme

7. The mark scheme has a column for **Process** and a column for **Evidence**. In most questions the majority of marks are awarded for the process the learner uses to reach an answer. The evidence column shows the *most likely* examples that will be seen. If the learner gives different evidence valid for the process, examiners should award the mark(s).
8. If working is **crossed out and still legible**, then it should be marked, as long as it has not been replaced by alternative work.
9. If there is a **choice of methods** shown, then mark the work leading to the answer given in the answer box or working box. If there is no definitive answer then marks should be awarded for the lowest scoring method shown.
10. A suspected **misread**, e.g. 528 instead of 523, may still gain process marks provided the question has not been simplified. Examiners should send any instance of a suspected misread to a senior examiner to review.
11. It may be appropriate to **ignore subsequent work (isw)** when the learner's additional work does not change the meaning of their answer.
12. **Correct** working followed by an **incorrect decision** may be seen, showing that the learner can calculate but does not understand the functional demand of the question. The mark scheme will make clear how to mark these questions.
13. **Transcription** errors occur when the learner presents a correct answer in working, and writes it incorrectly on the answer box e.g. 698 in the body and 689 in the answer box; mark the better answer if clearly only a transcription error. Examiners should send any instance of transcriptions errors to a senior examiner to review.

14. **Incorrect method** if it is clear from the working that the correct answer has been obtained from incorrect working, award 0 marks. Examiners must escalate the response to a senior examiner to review.
15. **Follow through marks (ft)** must only be awarded when explicitly allowed in the mark scheme. Where the process uses the learner's answer from a previous step, this is clearly shown.
 - Speech marks are used to show that previously incorrect numerical work is being followed through, for example '240' means their 240 coming from a correct or set of correct processes.
 - When words are used in { } then this value does not need to come from a correct process but should be the value the learner believes to be required. The constraints on this value will be detailed in the mark scheme. For example, {volume} means the figure may not come from a correct process but is clearly the value learners believe should be used as the volume.
16. Marks can usually be awarded where units are not shown. Where units are required this will be stated. For example, 5(m) indicates that the units do not have to be stated for the mark to be awarded.
17. Learners may present their answers or working in many **equivalent** ways. This is denoted oe in the mark scheme. Repeated addition for multiplication and repeated subtraction for division are common alternative approaches. The mark scheme will specify the minimum required to award these marks.
18. A **range** of answers is often allowed, when a range of answers is given e.g. [12.5, 13] this is the inclusive closed interval.
19. **Accuracy** of figures. Accept an answer which has been rounded or truncated from the correct figure unless other guidance is given. For example, for 12.66.. accept 12.6, 12.7, 12.66, 12.67 or any other more accurate figure.
20. **Probability** answers must be given as a fraction, percentage or decimal. If a learner gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths). If a learner gives the answer as a percentage a % must be used. Incorrect notation should lose the accuracy marks, but be awarded any implied process marks. If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.
21. **Graphs**. A linear scale must be linear in the range where data is plotted, and use consistent intervals. The scale may not start at 0 and not all intervals must be labelled. The minimum requirements for labels will be given, but examiners should give credit if a title is given which makes the label obvious.

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Other names

**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

**Sample assessment material for first teaching
September 2019**

Time: 25 minutes

Paper Reference **SAML2/01**

Mathematics

Level 2

Section A (Non – Calculator)



You must have:

Pen, HB pencil, eraser, ruler graduated in cm and mm, protractor,
pair of compasses.

Total Marks

My signature confirms that I will not discuss the content of the test with anyone.

Signature: _____

Instructions

- Use a **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer **all** questions.
- Write your final answers in the boxes provided.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and your answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- **Calculators may not be used**
- Take the value of π to be 3.14

Information

- The total mark for this section is 16
- The marks for each question are shown in brackets.
– *use this as a guide to how much time to spend on each question.*
- This sign shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ►

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SECTION A

Answer ALL questions. Write your answers in the spaces provided.

- 1 Ria works in a paint shop.
She needs to make 1500 ml of purple paint.

Ria makes purple paint by mixing red paint and blue paint and white paint in the ratio 3 : 2 : 1

How much blue paint does Ria need to make 1500 ml of purple paint?

(3)

ml

(Total for Question 1 is 3 marks)

2 Here is some information about the number of houses sold by 20 sales people.

Number of houses sold	Frequency		
1 – 5	7		
6 – 10	6		
11 – 15	5		
16 – 20	2		

Work out an estimate for the mean number of houses sold.

(3)

(Total for Question 2 is 3 marks)

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- 3 Amanda wants to buy a new mobile phone.
She sees these two offers for the same mobile phone.

Offer A

2 year contract
monthly cost £59
and
mobile phone cost £39.96

Offer B

SIM only
monthly cost £11
and
mobile phone cost £889.92

Amanda says,

'I will save more than £300 in total over 2 years with offer B'.

Use estimation to check if her statement is reasonable.
You **must** show your working.

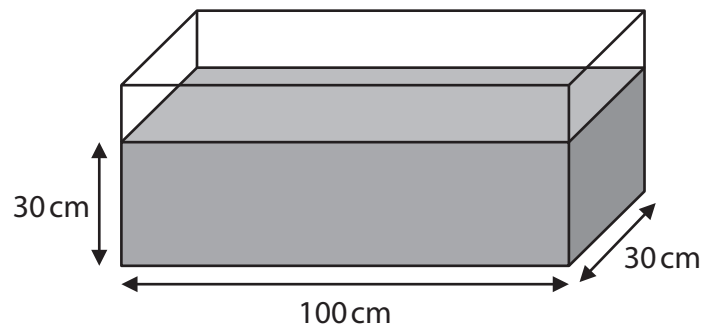
(4)

(Total for Question 3 is 4 marks)

4 Matt buys a new fish tank.

The fish tank is in the shape of a cuboid.

The diagram shows water in the tank.



Matt knows

$$1000 \text{ cm}^3 = 1 \text{ litre}$$

$$1 \text{ gallons} = 4.5 \text{ litres}$$

He can keep 2 small fish in the tank for every 1 gallon of water in the tank.

Matt thinks he can keep more than 36 small fish in the tank.

Is Matt correct?

(6)

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(Total for Question 4 is 6 marks)

TOTAL FOR SECTION A = 16 MARKS

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Level 2 - Section A: Mark Scheme

Question	Process	Mark	Mark Ref	Evidence
Q1	Begins to work with ratio	1 or	A	$1500 \div (3 + 2 + 1) (=250)$ oe
	Full process to find the amount of blue paint	2 or	AB	'250' \times 2 (=500) oe
	Correct answer	3	ABC	500 (ml)
Total marks for question 3				

Question	Process	Mark	Mark Ref	Evidence
Q2	Process to multiply a consistent value of number of houses by frequency	1 or	A	e.g. 3×7 or 8×6 or 13×5 or 18×2 Allow use of 'midpoints' provided they are consistent and within an interval including the end points OR 21 and 48 and 65 and 36 seen (condone 1 error or omission)
	Full process to find the estimate of the mean	2 or	AB	$(3 \times 7 + 8 \times 6 + 13 \times 5 + 18 \times 2) \div (7 + 6 + 5 + 2) (=8.5)$ Allow use of 'midpoints' provided they are consistent and within an interval including the end points
	Accurate figure	3	ABC	8.5 Accept 8 or 9, supported by accurate working
Total marks for question 3				

Question	Process	Mark	Mark Ref	Evidence
Q3	<p>Begins to work with 12 or 24 months, figure could be rounded, or difference in costs using rounded figures</p> <p>Full process to find total cost of one offer or cost difference over 24 months</p> <p>Full process to find total savings</p> <p>Valid decision with accurate figures supported by working.</p>	<p>1 or</p> <p>2 or</p> <p>3</p> <p>4</p>	<p>A</p> <p>AB</p> <p>ABC</p> <p>ABCD</p>	<p>e.g. $60 \times 24 (=1440)$ OR $10 \times 24 (=240)$ OR $60 - 10 (=50)$ OR $900 - 40 (=860)$</p> <p>e.g. '1440' + 40 (=1480) or '240' + 900 (=1140) OR '50' \times 24 (=1200) Allow using accurate figures for marks A and B only</p> <p>e.g. '1480' – '1140' (=340) oe OR '1200' – '860' (=340) oe</p> <p>e.g. Yes AND (£) 340</p>
Total marks for question		4		

Question	Process	Mark	Mark Ref	Evidence
Q4	<p>Process to find the volume</p> <p>Accurate figure for volume of water</p> <p>Process to convert between cm³ and litres</p> <p>Uses the conversion rate appropriately or works with proportion</p> <p>Full process to find figures to compare</p> <p>Valid decision with accurate figures</p>	<p>1 or</p> <p>2</p> <p>1</p> <p>1 or</p> <p>2 or</p> <p>3</p>	<p>A</p> <p>AB</p> <p>C</p> <p>D</p> <p>DE</p> <p>DEF</p>	<p>$30 \times 100 \times 30 (=90\ 000)$</p> <p>90 000 (cm³) oe</p> <p>e.g. '90 000' ÷ 1000 (=90)</p> <p>e.g. '90' ÷ 4.5 (=20) oe OR</p> <p>10 gallons is 45 litres OR</p> <p>$36 \div 2 (=18)$</p> <p>Calculations may be seen using a build-up method</p> <p>e.g. '20' × 2 (=40) OR</p> <p>'18' × 4.5 (=81) oe OR</p> <p>'90' ÷ 4.5 (=20) oe and $36 \div 2 (=18)$</p> <p>e.g. Yes AND 40 (fish) OR</p> <p>Yes AND 81 (litres) and 90 (litres) OR</p> <p>Yes AND 20 (gallons) and 18 (gallons)</p>
Total marks for question		6		

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**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

**Sample assessment material for first teaching
September 2019**

Time: 1 hour 30 minutes

Paper Reference **SAML2/01**

Mathematics

Level 2

Section B (Calculator)



You must have:

Pen, calculator, HB pencil, eraser, ruler graduated in cm and mm, protractor, pair of compasses.

Total Marks

My signature confirms that I will not discuss the content of the test with anyone.

Signature: _____

Instructions

- Use a **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer **all** questions.
- Write your final answers in the boxes provided.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and your answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button take the value of π to be 3.14
- **Calculators may be used.**

Information

- The total mark for this section is 48
- The total mark for this paper is 64
- The marks for each question are shown in brackets.
– *use this as a guide to how much time to spend on each question.*
- This sign shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ►

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SECTION B

Answer ALL questions. Write your answers in the spaces provided.

- 1 Data set A has a median value of 3.1

Here is data set B.

14 -9 28 -38 -13 -2

- (a) Write a statement to compare the median values of the two sets of data.

(2)



- (b) Show a check of your answer for the median of data set B.

(1)

(Total for Question 1 is 3 marks)

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2 Dan throws two fair dice.

The numbers on dice A are 1 -2 3 -4 5 -6

The numbers on dice B are -1 2 -3 4 -5 6

The table shows some total scores from throwing the two dice.

		Dice A						
		+	1	-2	3	-4	5	-6
Dice B	-1		0	-3	2	-5		-7
	2		3		5	-2	7	
	-3		-2	-5		-7		
	4		5	2		0		
	-5		-4		-2		0	-11
	6				9	2		0

(a) Complete the table.

(1)

Dan throws the two dice once.

(b) What is the probability that the total score is -11?

(1)

Dan throws the two dice again.

(c) What is the probability that the new total score is 0?

(1)

(Total for Question 2 is 3 marks)

3 Last year Zack had two jobs.

Zack worked

- in an office for 12 months and earned £2600 per month
- at a gym for 39 weekends and earned £80 per weekend.

What fraction of his total income last year came from his work at the gym?
Write the fraction in its simplest form.

(4)

$$\frac{\square}{\square}$$

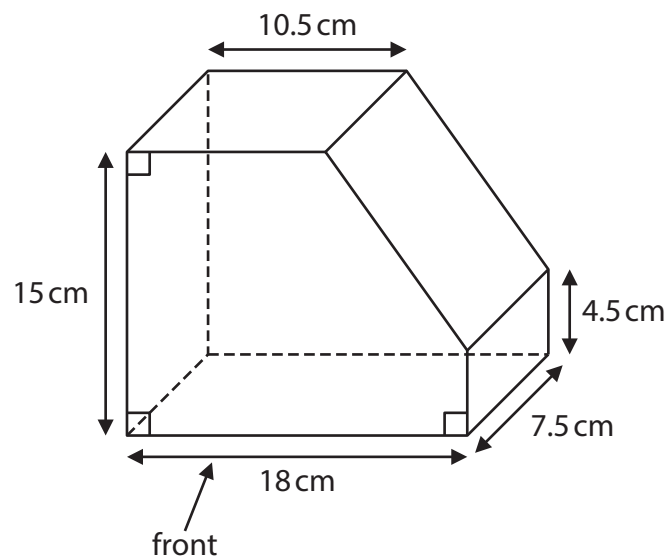
(Total for Question 3 is 4 marks)

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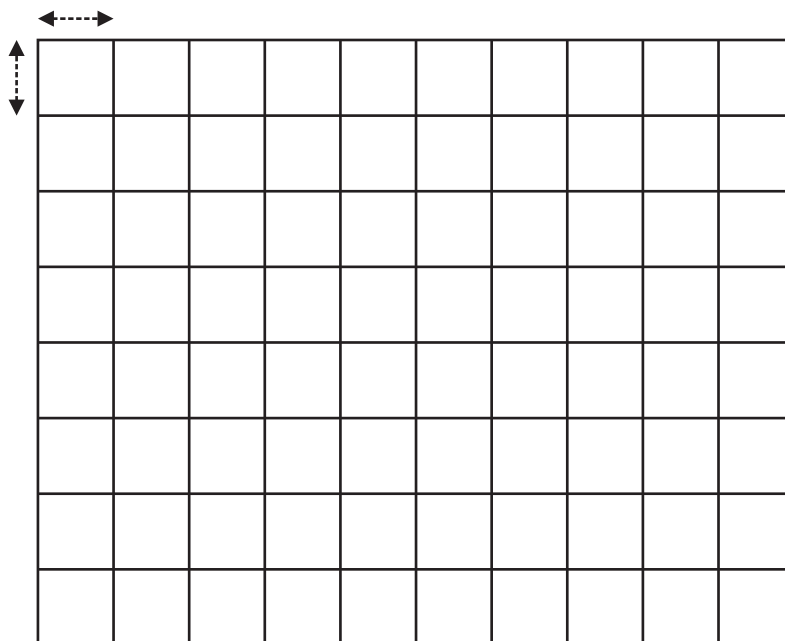
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- 4 Here is a prism.
The cross section of the prism is a pentagon.



Draw the front elevation of the prism on the grid.
Use the scale 1 : 3

(3)

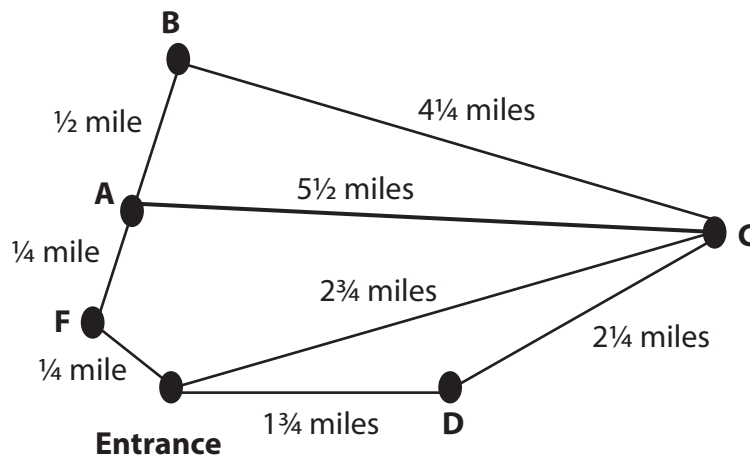


Key

←-----→ 1 cm on the page

(Total for Question 4 is 3 marks)

5 Olga has this sketch of the paths in a park.



She wants a cycle route that

- starts and ends at the entrance
- goes through point C at least once
- has a total length between 15 **kilometres** and 20 **kilometres**.

1 km = 0.6 miles.

Plan a suitable route.

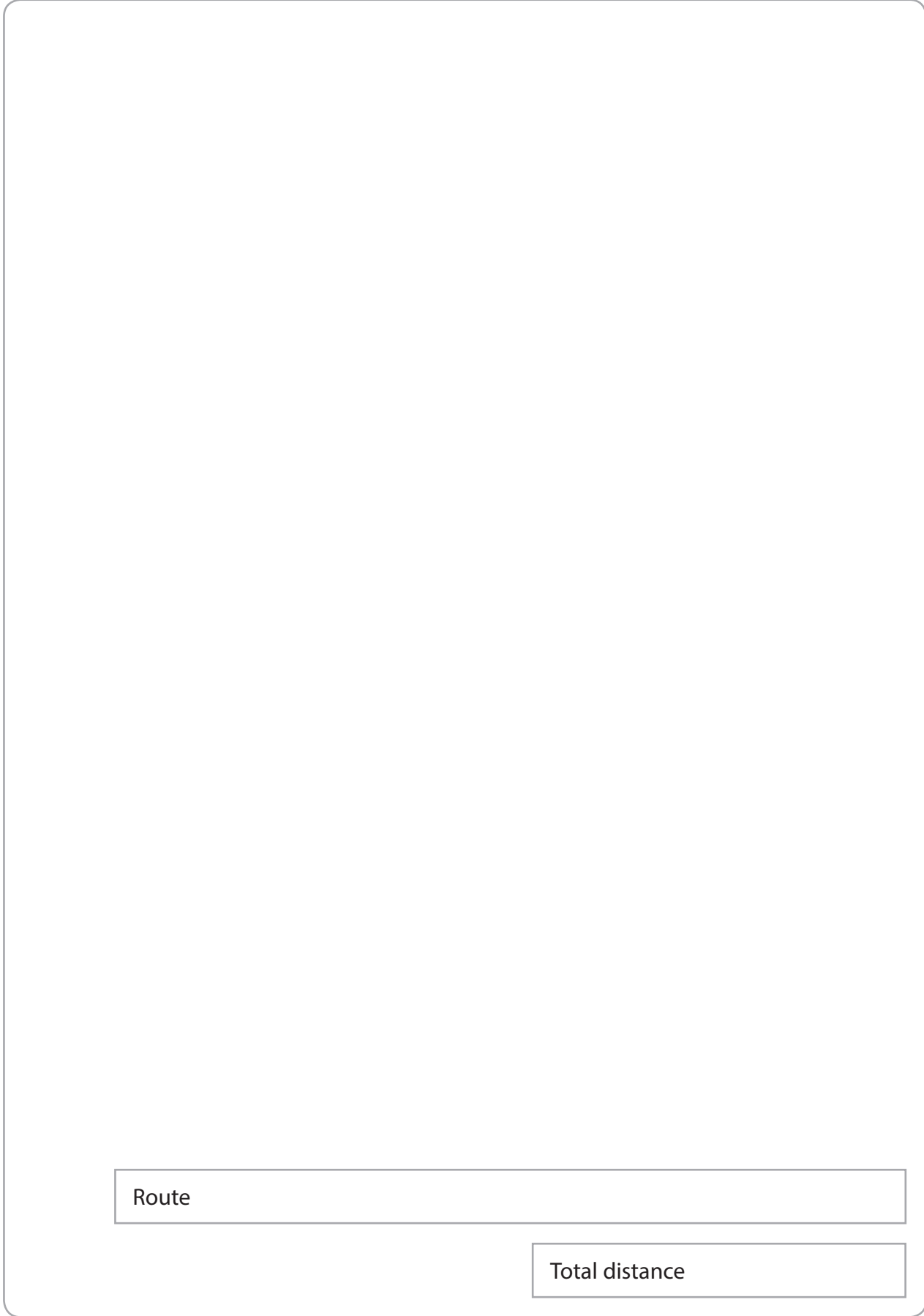
Work out the total distance of the route.

(5)

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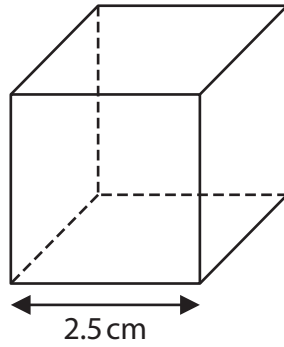


Route

Total distance

(Total for Question 5 is 5 marks)

6 Here is a cube of side length 2.5 cm.



Work out the surface area of this cube.

(3)

cm²

(Total for Question 6 is 3 marks)

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- 7 Megan is the manager of a computer shop.
She organises a sale with 18% off all tablets.

Megan changes the price of one tablet from £389 to £330.98

(a) Has Megan changed the price correctly?

(3)



(b) Use estimation to show a check of your answer.

(1)

(Total for Question 7 is 4 marks)

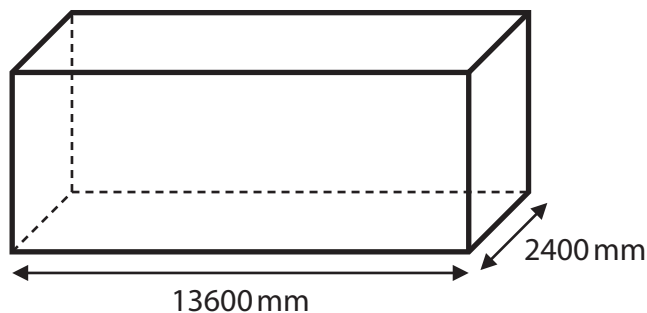
8 A team of workers deliver identical fridges.

The team will use the average time to fully load an old lorry to predict the time to fully load a new lorry.

The table shows the times it took to fully load the old lorry with 24 fridges.

Time (mins)	52	60	55	59	54	63	56
-------------	----	----	----	----	----	----	----

The diagram shows the space available for fridges in the new lorry. The space is in the shape of a cuboid.



Each fridge needs a rectangular floor space 1000 mm by 800 mm.

The team do not stack fridges.

They think it will take less than 90 minutes to fully load the new lorry.

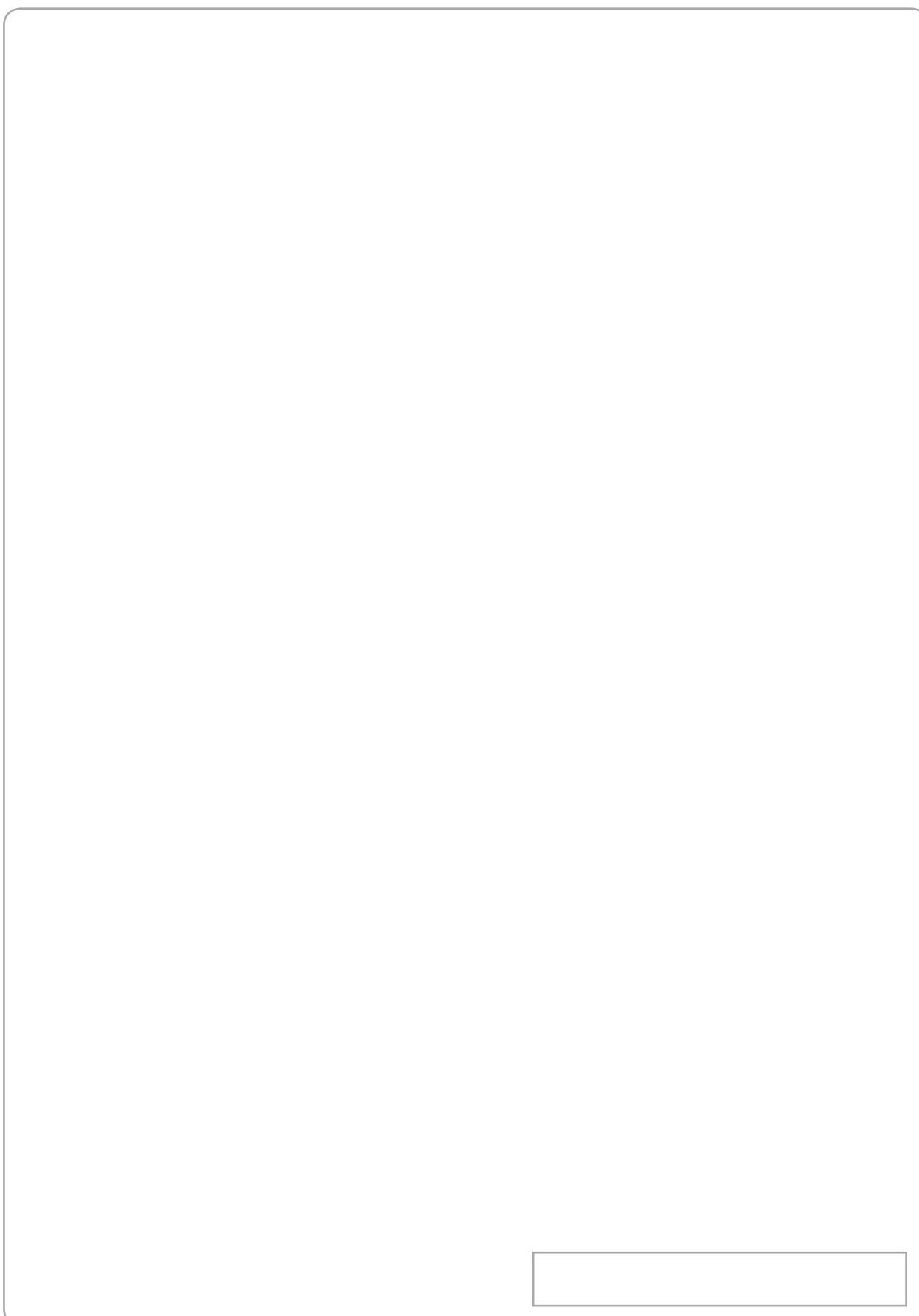
Are they correct?

(6)

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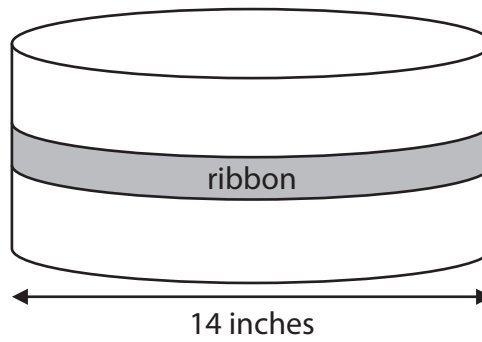
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(Total for Question 8 is 6 marks)

- 9 Louis makes a cake.
The cake is in the shape of a cylinder with diameter 14 inches.



Louis needs to put a ribbon around this cake.
The ribbon will go around the cake once with a 6 inch overlap.
Louis has a piece of ribbon 48 inches in length.

Is this piece of ribbon long enough for this cake?

(3)

(Total for Question 9 is 3 marks)

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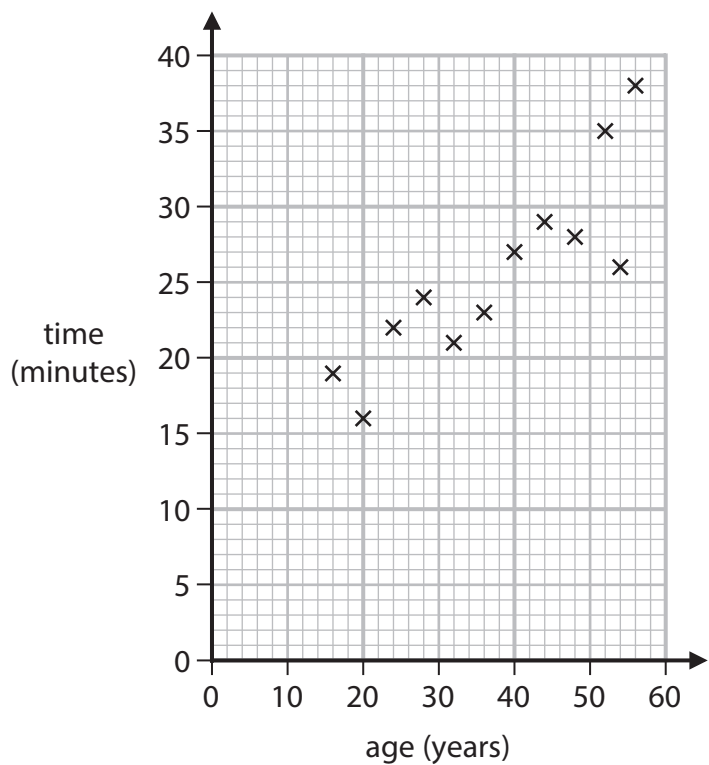
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10 The scatter diagram shows some information about 12 athletes who have run a race.



Here is the information for another athlete

- age 36, time 29 minutes.

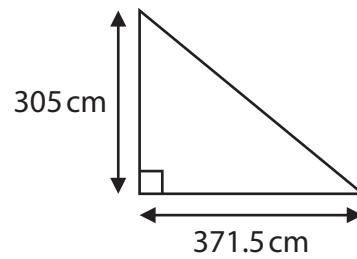
(a) Plot this information on the scatter diagram. (1)

(b) Draw the line of best fit on the scatter diagram. (1)

(c) Describe the relationship shown in this scatter diagram. (1)

(Total for Question 10 is 3 marks)

- 11 George will cover part of a floor with tiles.
The part of the floor is in the shape of a triangle as shown.



George buys tiles in packs.
Each pack covers 1 m^2 and costs £39.95

The tiles can be cut and joined.
George gets $\frac{1}{3}$ off the cost of the packs of tiles.

Work out the lowest cost of the tiles for George.

(5)

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£

(Total for Question 11 is 5 marks)

- 12 Gabi wants to buy a flat.
The cost of the flat is £175 000

The bank uses this formula to work out the mortgage Gabi can get.

$$M = 4.625A$$

M = mortgage (£)
A = annual income (£)

Gabi has an annual income of £34 000
She will have to pay a deposit for the flat.
The deposit is the difference between the cost of the flat and the mortgage.

- (a) Work out the deposit Gabi will have to pay.

(3)

£

Gabi invests £4000 for 3 years.
The investment earns 2% compound interest per annum.

(b) Work out the value of the investment at the end of 3 years.

(3)

£

(Total for Question 12 is 6 marks)

TOTAL FOR SECTION B = 48 MARKS

TOTAL FOR PAPER = 64 MARKS

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Level 2 - Section B: Mark Scheme

Question	Process	Mark	Mark Ref	Evidence
Q1(a)	Process to find the median	1 or	A	e.g. $(-2 + -9) \div 2 (= -5.5)$
	Writes a comparative statement	2	AB	e.g. -5.5 and the median value for set B is smaller than set A.
Q1(b)	Valid check for the median	1	C	e.g. $'-5.5' \times 2 = -11$ and $-2 + -9 = -11$
Total marks for question		3		

Question	Process	Mark	Mark Ref	Evidence
Q2(a)	Completes sample space table	1	A	correct cells in the table, see solution below.
Q2(b)	Accurate figure	1	B	$\frac{1}{36}$ oe
Q2(c)	Accurate figure	1	C	$\frac{6}{36}$ oe
Total marks for question		3		

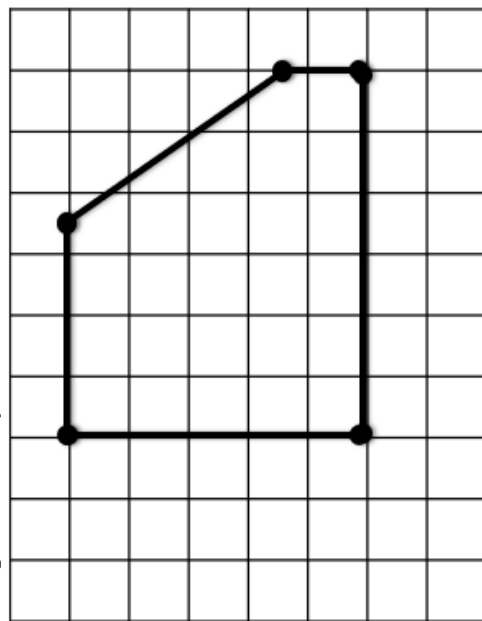
Correct answer for Q2a

+	1	-2	3	-4	5	-6
-1	0	-3	2	-5	4	-7
2	3	0	5	-2	7	-4
-3	-2	-5	0	-7	2	-9
4	5	2	7	0	9	-2
-5	-4	-7	-2	-9	0	-11
6	7	4	9	2	11	0

Question	Process	Mark	Mark Ref	Evidence
Q3	<p>Begins the process to work with income</p> <p>Process to find total annual or monthly or weekly income for both jobs</p> <p>A process to form an appropriate fraction</p> <p>Accurate figure (given as fraction in its simplest form)</p>	<p>1 or</p> <p>2</p> <p>1 or</p> <p>2</p>	<p>A</p> <p>AB</p> <p>C</p> <p>CD</p>	<p>e.g. $2600 \times 12 (=31200)$ or $80 \times 39 (=3120)$ OR $80 \times 39 \div 12 (=260)$ OR $2600 \times 12 \div 52 (=600)$ or $80 \times 39 \div 52 (=60)$</p> <p>e.g. $2600 \times 12 + 80 \times 39 (=34320)$ OR $'3120' \div 12 + 2600 (=2860)$ OR $2600 \times 12 \div 52 + 80 \times 39 \div 52 (=660)$</p> <p>e.g. $\frac{'3120'}{\{\text{total}\}}$ or $\frac{'260'}{\{\text{total}\}}$ or $\frac{'60'}{\{\text{total}\}}$</p> <p>Accept $\{\text{total}\}$ to be the total of all income or the total of the office income annually or monthly or weekly</p> <p>$1 \frac{1}{11}$</p>
Total marks for question				4

Question	Process	Mark	Mark Ref	Evidence
Q4	Begins to draw front elevation	1 or	A	A rectangle 6 sq lengths by 5 sq lengths OR 2 of: $1.5 \div 3 (=5)$, $10.5 \div 3 (=3.5)$, $4.5 \div 3 (=1.5)$, $18 \div 3 (=6)$, $7.5 \div 3 (=2.5)$ OR Pentagon with at least 2 correct sides: 5, 3.5, 4.3, 1.5, 6 sq lengths and 2 right angles at the base OR Similar pentagon in incorrect scale
	Improves front elevation	2 or	AB	Pentagon with at least 3 correct sides: 5, 3.5, 4.3, 1.5, 6 sq lengths and 3 right angles OR Fully correct pentagon in incorrect orientation
	Correct front elevation	3	ABC	Pentagon with all correct sides: 5, 3.5, 4.3, 1.5, 6 sq lengths and 3 right angles in correct orientation
Total marks for question 3				

Example of a fully correct answer



Question	Process	Mark	Mark Ref	Evidence
Q5	Fully correct route	1	A	Route starts and ends at E and covers the total distance of between 15 and 20 km (between 9 and 12 miles) and goes through point C at least once e.g. E, D, C, A, F, E Can include going through the same point twice May be implied by subsequent calculations
	Converts between miles and km	1	B	e.g. $15 \times 0.6 (=9)$ or $20 \times 0.6 (=12)$ or $0.25 \div 0.6 (=0.41..)$ or ' $10' \div 0.6 (=16.66..)$
	Process to find total distance for their route	1 or	C	e.g. $1.75 + 2.25 + 5.5 + 0.25 + 0.25 (=10)$ oe Must start and end at E and go through at least two other points
	Accurate distance figure for their route	2	CD	e.g. 10 or 16.66.. truncated or rounded to 1 d.p. or better
	Distance for their route with stated units	1	E	e.g. 10 miles or 16.6... km Award this mark for correct units stated even if figure for their distance is inaccurate
Total marks for question		5		

Question	Process	Mark	Mark Ref	Evidence
Q6	Process to find area of one face	1 or	A	$2.5^2 (=6.25)$
	Full process to find surface area of the cube	2 or	AB	$6 \times 2.5^2 (=37.5)$
	Accurate figure	3	ABC	37.5
Total marks for question		3		

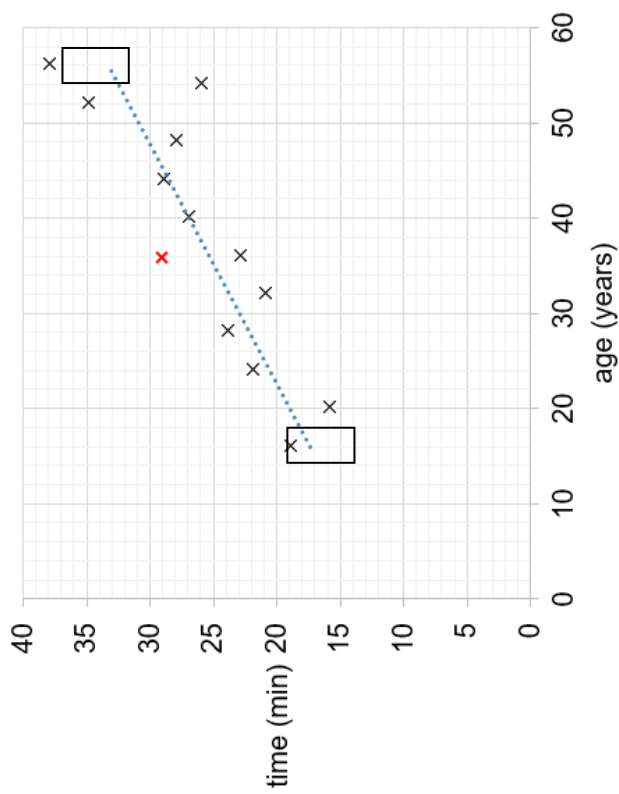
Question	Process	Mark	Mark Ref	Evidence
Q7(a)	Begins to work with percentage	1 or	A	$0.18 \times 389 (=70.02)$ oe OR $1 - 0.18(=0.82)$ OR $330.98 \div 389 (=0.85..)$
	Full process to find figures to compare	2 or	AB	'0.82' $\times 389 (=318.98)$ oe OR $330.98 \div '0.82' (=403.63..)$ oe OR $1 - 0.18(=0.82)$ and $330.98 \div 389 (=0.85..)$ OR $0.18 \times 389 (=70.02)$ and $389 - 330.98 (=58.02)$
	Valid decision with accurate figures	3	ABC	e.g. No AND (£)318(.98) (correct new price) OR No AND (£)403(.63..) (original price) OR No AND 82(%) and 85(.0.. %) oe OR No AND (£)70(.02) and (£)58(.02)
Q7(b)	Valid estimation check	1	D	e.g. $20 \div 100 \times 400 = 80$ is close to 70.02 or $80 \div 100 \times 400 = 320$ is close to 318.98 or $80 \div 100 \times 390 = 312$ is too far from 330.98
Total marks for question		4		

Question	Process	Mark	Mark Ref	Evidence
Q8	<p>Process to work with average</p> <p>Begins to work with dimensions</p> <p>Full process to find the number of fridges</p> <p>Begins to work with load times</p> <p>Full process to find figures to compare</p> <p>Valid decision with accurate figures from their correct working</p>	<p>1</p> <p>1 or</p> <p>2</p> <p>1 or</p> <p>2 or</p> <p>3</p>	<p>A</p> <p>B</p> <p>BC</p> <p>D</p> <p>DE</p> <p>DEF</p>	<p>e.g. 56 identified (median) OR (52 + 60 + 55 + 59 + 54 + 63 + 56) ÷ 7 (=57)</p> <p>13600 ÷ 1000(=13.6) or 2400 ÷ 800(=3) OR 13600 ÷ 800(=17) or 2400 ÷ 1000(=2.4)</p> <p>'13' × '3' (=39) OR '17' × '2' (=34)</p> <p>e.g. '56' ÷ 24 (=2.33..) or '57' ÷ 24 (=2.375)</p> <p>e.g. '39' × '2.33..' (=91) or OR '39' × '2.375 (=92.625) OR 90 ÷ '39' (=2.307..) OR Allow use of '34' for '39'</p> <p>e.g. No AND 91 (mins) OR No AND 92(.625) (mins) OR No AND 2.30(7..) and 2.33(3..) (min per fridge)</p>
Total marks for question				6

Question	Process	Mark	Mark Ref	Evidence
Q9	<p>Begins to work with perimeter</p> <p>Full process to find figures to compare</p> <p>Valid decision with accurate figures</p>	<p>1 or</p> <p>2 or</p> <p>3</p>	<p>A</p> <p>AB</p> <p>ABC</p>	<p>$\pi \times 14$ (=43.9..) OR $48 - 6$ (=42) Allow use of 3.14 or better for π</p> <p>'43.9.' + 6 (=49.9..) OR $\pi \times 14$ (=43.9..) and $48 - 6$ (=42) OR $48 - '43.9.'$ (=4.01..)</p> <p>No AND 49(.9..) (inches) OR No AND 43(.9..) and 42 (inches) OR No AND 4(.01..) (inches for the overlap)</p>
Total marks for question		3		

Question	Process	Mark	Mark Ref	Evidence
Q10(a)	Correct plotting	1	A	Plots point (36,29)
Q10(b)	Correct line of best fit	1	B	Line of best fit placed correctly See guidance boxes on diagram, line must go in or pass through them
Q10(c)	Correct description of correlation	1	C	e.g. positive correlation (between age and time) OR an explanation in context e.g. as you get older it takes you longer to run the race
Total marks for question		3		

Example of correct answer



Question	Process	Mark	Mark Ref	Evidence
Q11	Uses consistent units	1	A	e.g. 3.05(m) and 3.715(m) or 10000(cm ²) May be seen or implied by subsequent working
	Process to find area	1	B	'3.05' × '3.715' ÷ 2 (=5.66..)
	Process to work with whole packs	1	C	'6' × 39.95 (=239.7) OR '26.63..' × '6' (=159.8) OR '6' ÷ 3 × 2 (=4) oe
	Process to work with fractional discount	1	D	'239.7' ÷ 3 × 2 (=159.8) oe OR 39.95 ÷ 3 × 2 (=26.63..) oe OR 39.95 × '4' (=159.8)
	Correct answer	1	E	159.80
Total marks for question				5

Question	Process	Mark	Mark Ref	Evidence
Q12(a)	Works with formula	1 or	A	$4.625 \times 34\,000 (=157\,250)$
	Full process to find the amount of deposit	2 or	AB	$175\,000 - '157\,250' (=17\,750)$
	Accurate figure	3	ABC	17 750
Q12(b)	Begins to work with compound interest	1 or	D	$(100 + 2) \div 100 (=1.02)$ oe
	Full process to find the total amount	2 or	DE	e.g. $'4000' \times (1 + '0.02')^3 (=4244.832)$ oe
	Accurate figure	3	DEF	$4244.83(2)$ or 4244.84
Total marks for question				6

June 2019

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