GCSE Mathematics (Edexcel 8462)

Foundation Tier

Mark scheme

Introduction

The information provided for each question is intended to be a guide to the type of answers students may produce, but can be neither exhaustive nor prescriptive. Award marks according to your professional judgement for all appropriate responses.

Disclaimer

- These mark schemes and exemplar answer content are entirely the work of the question author and have not been produced by, reviewed by or endorsed by Edexcel.
- Where marks are suggested and levels mapped to particular styles or features of answers, these are intended for guidance only and cannot reflect the full examination marking process, which involves moderation and alignment of level boundaries across a full, national student cohort that cannot be determined from a standalone product such as this set of Practice Papers.
- Therefore, mark allocation, mark totals, suggested levels and overall assessments of performance as found in these Practice Papers and Mark Schemes represent only a limited guide to possible outcomes, and are not a reliable indicator of actual performance.

Information for teachers

1. General

The mark scheme for each question gives:

- the marks available for each part of the question
- the total marks available for the question
- the correct answer or, if multiple correct answers are possible, a typical correct answer with variations
- extra information to help with making decisions about how many marks to award.

The 'extra information' is aligned to the appropriate answer and is only intended for consideration with that particular part of the answer.

2. Marks and working

All the marks on the mark scheme are designed to be awarded; mark schemes should be applied positively.

Questions where working is not required: In general, the correct answer should be given full marks.

Questions that specifically require working: In general, students who do not show working on this type of question will get no marks – full details will be given in the mark scheme for each individual question.

3. Crossed out work

This should be marked unless it has been replaced with an alternative response.

4. Choice of method

If there is a choice of methods shown, mark the method that leads to the answer given on the answer line.

If no answer appears on the answer line then mark both methods **as far as they are identical** and award these marks.

5. Incorrect method

If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks.

6. Follow through marks

Follow through marks that involve a single stage calculation can be awarded without working.

Follow through marks that involve more than one stage of calculation can only be awarded on sight of the relevant working.

7. Ignoring subsequent work

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question or its context.

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect.

8. Probability

Probability answers should be given as a fraction, percentage or decimal. If a decimal equivalent to a probability is given, this should be written to at least 2 decimal places (unless tenths).

Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.

If a probability answer is given on the answer line using both incorrect and correct notation, award the marks.

If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

9. Linear equations

Unless indicated otherwise in the mark scheme, full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously identified in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded (embedded answers).

10. Range of answers

Unless otherwise stated, when an answer is given as a range (e.g 3.5–4.2) then this is inclusive of the end points (e.g. 3.5, 4.2) and all numbers within the range.

Paper 1						
QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE			
1	$6.7 \times 100 = 670$	670	1			
2		3.676	1			
3		63	1			
4	$7 \div 2 = 3.5$	$\frac{7}{2}$	1			
5	$8 \times 8 \times 8 = 512$	512	1			
6	9 × 15 = 135	135	1			
7	$-5 \times -5 \times -5 = -125$	-125	1 negative sign required.			
8	$133 \div 7 = 19$	19	1			
9	$\frac{6}{x} = 2 \Rightarrow x = \frac{6}{2} = 3$	3	1			
10	$x + 21 = 30 \rightarrow x = 30 - 21 = 9$	9	1			
11	To calculate 1% of £400 → $\frac{\pounds 400}{100} = \pounds 4$ To calculate 15% of £400 → $= \pounds 4 \times 15 = \pounds 60$	£60	1 1 method mark accept correct alternative.			
12a	10 + 8 = 18 7 × 8 = 56	18 56	1 1			
	79 - 33 = 46	46	1			
12b		18, 46, 56	1			

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
13a	$258 \times 18 = 4644$	4644	2
13b	5.93×10^{2}	5.93×10^{2}	1
14a	$25 + 11 + 50 + 55 + 25 + 8 = 174$ $\frac{174}{6} = 29$ $100 + 29 = 129$	129	1 1 method mark accept correct alternative.
14b	125 is the only number that occurs more than once	125	1
14c	range = highest value – lowest value 155 – 108 = 47	47	1 1 method mark.
15a	$\frac{-3}{1.5} = -2$	-2	1
15b		3	1
15c	y = -2x + 3	y = -2x + 3	2 Subtract 1 for each incorrect coefficient.
15d	y = -2x + 4	y = -2x + 4	2 Subtract 1 for each incorrect coefficient. Allow ECF mark max 1 if same incorrect <i>m</i> value is used as in previous question and <i>c</i> value correctly stated.
16a	1 + 2 + 5 = 8 $\frac{160}{8} = 20$ cement = 1 × 20 = 20 kg sand = 2 × 20 = 40 kg gravel = 5 × 20 = 100 kg	cement = 20 kg sand = 40 kg gravel = 100 kg	1 3 for method accept sensible alternative to workings.

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
16b	cement is 1 part to 8 parts concrete	No	1
	1kg of cement \rightarrow 8 kg concrete		2 for method.
	5kg of cement \rightarrow 40 kg concrete		40 kg must be seen if not
	40kg < 45kg		maximum 1 mark
	Melissa can't finish the job		for method.
17	$5x + 4y = 41 \rightarrow 1$	x = 5	1
	$3x + 2y = 23 \rightarrow 2$	y = 4	
	Elimination method		
	$6x + 4y = 46 \rightarrow 2 \; (\times \; 2)$		
	$5x + 4y = 41 \rightarrow 1$ subtract		1
	<i>x</i> = 5		
	Substitute		1 for method.
	x = 5 into equation 1		sensible
	$(5 \times 5) + 4y = 41$		method of either
	4y = 41 - 25		elimination or substitution
	4y = 16		method.
	y = 4		

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
18	y = x - 1 $y = x - 1$	x = 3 y = 2	1 1 for correct plot of $2x + 3y = 12$ 1 for correct plot of $x - y = 1$
19a	$\sin ABC = \frac{\text{opp}}{\text{hyp}}$ $\sin 30^\circ = \frac{9}{\text{hyp}} [\sin 30^\circ = 0.5]$ $0.5 = \frac{9}{\text{hyp}}$ $\text{hyp} = \frac{9}{0.5} = 18 \text{ km}$	18 km	1 1 correct substitution into $\sin ABC = \frac{\text{opp}}{\text{hyp}}$ 1 recall that $\sin 30^\circ = 0.5$
19b	$adj = \sqrt{hyp^2 - opp^2}$ $adj = \sqrt{18^2 - 9^2}$ $adj = \sqrt{324 - 81}$ $adj = \sqrt{243}$ adj = 15.6 16 km	16 km	2 marks If final answer not seen award 1 max for: $\sqrt{243}$ or number that rounds to 15.6 seen.
20a		<u>1</u> 10	1
20b		3 10	1
20c	$\frac{\frac{6}{10} \times \frac{6}{10}}{\frac{36}{100}} = \frac{18}{50} = \frac{9}{25}$	<u>9</u> 25	2 If final answer not stated correctly award 1 max for either $\frac{36}{100}$ or $\frac{18}{50}$

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
21a		Ratio compares part to part.	1
		Proportion compares part to whole.	Both definitions required.
21b	8:12	2:3	1
	2:3		
21c	$\frac{12}{20} \times 100 = 60\%$	60%	1
			Accept 3:5 or 12:20
22a		Prime factors of 14: 2, 7	1
		Prime factors of 42: 2,3,7	1
22b	The common prime factors are	14	1 solution
	2 and 7		1 method mark
02	$2 \times 7 = 14$	0250	4
23	$10\% = \frac{300}{2} = 62.50$	1200	2 method
	$1\% = \frac{1}{120} = 22.30$ $100\% \rightarrow f2.50 \times 100 = f250$		Accept
	$100\% \neq 22.50 \times 100 = 2250$		alternative using decimal
			multipliers.
24	4pq(p+4q)	4pq(p+4q)	2
			Accept $16n \alpha^{(p)} + \alpha^{(p)}$
			$10pq(\frac{1}{4} + q)$
25a	$3 \text{ cm} \times 4 \text{ cm} \times 2 \text{ cm} = 24 \text{ cm}^3$	24 cm ³	1
25b	density = $\frac{\text{mass}}{1}$	11, 11.25 or 11.3 g/cm ³	1
	$\frac{270}{24} =$		1 correct
	²⁴ 11, 11.25 or 11.3 g/cm ³		substitution into
			Penalise incorrect
			rounding.
25c		Face A	1
		It has the largest area (pressure is force divided by area).	1

QUESTION	WORKING						ANSW	ER	MARKS AND GUIDANCE
26a	Angle θ	0 °	30°	45°	60°	90°	30°		1 both required.
	sin θ		0.50		0.87		0.50		
	cos θ		0.87		0.50		0.87		
							60°		1
							0.07		both required.
							0.87		
							0.50		
26b	$180^{\circ} - (90^{\circ} + 30^{\circ}) = 60^{\circ}$						60°		1
	Requires knowledge that ACB is a right angle.								
26c	$\sin \theta = \frac{\text{opp}}{\text{hyp}}$					5 cm		1	
	$\sin 30^\circ = \frac{CB}{10}$							1 correct	
	$CB = \sin 30^{\circ} \times 10 \ [\sin 30^{\circ} = 0.5]$							1 correct	
	$CB = 0.5 \times$	10 = 5	5 cm						rearrangement.
27	To calculate	e lengtl	n of box	:			Length 50 cm	n < 56 cm	1
	volume = w	vidth ×	length	× heigh	ıt		50 1115		1
	length = $\frac{1}{wi}$	$\frac{\text{volume}}{\text{dth} \times \text{heig}}$	ght				Width 25 cm	< 26 cm	1 method mark correct
	length = $\frac{31\ 250}{25 \times 25}$					so fits		substitution for	
	$=\frac{31\ 250}{625}$								iength.
	= 50 cm								1 method
	length 50 c	m < 56	cm so	fits					mark correct
	width 25 cm	n < 26	cm so f	its					rearrangement for length.
TOTAL									80

	Paper 2						
QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE				
1		$\frac{7}{10}$	1				
2		2, 3, 5, 7	1				
3		1:3	1				
4	$\frac{44}{100} = \frac{11}{25}$	<u>11</u> 25	2 both $\frac{44}{100}$ and $\frac{11}{25}$ seen. (1 only $\frac{44}{100}$ seen.)				
5a		$2x^{3}$	1				
5b	$p^{3} + 4p^{3} - 2p^{3} - 2p^{3} = 8$ $p^{3} = 8$ p = 2	<i>p</i> = 2	1 clear correct method. 1 correct final answer.				
5c		(x+2)(x+3)	1				
6a		$\frac{1}{8}$	1				
6b		$\frac{3}{8}$	1				
6c	$\frac{4}{8} \times \frac{3}{7} \times \frac{2}{6} = \frac{24}{336} = \frac{1}{14}$	$\frac{\frac{4}{8} \times \frac{3}{7} \times \frac{2}{6}}{\frac{24}{336}} =$	1 correct identification of probabilities.				
		14	 multiplication of probabilities. unsimplified answer. simplified answer. 				

QUESTION	WOR	KING		ANSWER	MARKS AND GUIDANCE
7a	Midway (m) 26.5 29.5 32 34 $m \times f_{total} =$ 503.5 + 885 + 10 $\frac{3057}{100} =$ 30.57 or 3	$m \times f$ 503.5 885 1056 612 056 + 612 81 inches	$m \times f$ 503.5 885 1056 612 $m \times f_{total} = 30$ 30.57 or 31 in)57 nches	2 for correct calculation of values. 1 for 3057 1 for correct final answer expressed as 30.57 or 31 inches.
7b			Modal waist size is $31 < w \le 33$ (as the most are sold)		1
7c			He should buy more dresses of size 12 to 14 as it sold the most.		1
8a				-3 -2 -1 0 1 2 3 4 5 6 7 8 9 10	1 line starts at –3 1 line ends at 7
8b			$2 \le \text{money} \le 5$		 values 2 and seen. signs correctly presented.
9	$\frac{96}{(5+3)} = \pounds 12$ Jane has 5 × 12 Peter has 3 × 12 Jane has (60 - 3 than Peter.	= £60 and 2 = £36 36) = £24 more	$\frac{96}{8} = \pounds 12$ Jane = 60 an Jane has (60 Peter.	d Peter = $£36$ - 36) = $£24$ more than	1 1 1

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
10a	$opp = \sqrt{hyp^2 - adj^2}$ $opp = \sqrt{12^2 - 4.5^2}$		1 correct rearrangement of formula.
	opp = 11.1(2) m can reach window		1 correct substitution.
	as $11.12 > 11$		1 correct final calculation.
	hyp = $\sqrt{\text{opp}^2 - \text{adj}^2}$ hyp = $\sqrt{11^2 + 4.5^2}$	can reach window	1 only award if proved by calculation.
	hyp = 11.88 can reach window as 12 m > 11.88 m		Alternative method has same mark tariff as original method.
			Accept similar correct method with adjacent side.
10b	angle = $\tan^{-1}(11/4.5)$	67.7°, 68° or 67.97°	1 correct answer.
	$= 67.7^{\circ} (68^{\circ})$		1 use of correct formula.
			Accept calculation with sin or cos.
11a	$90 - 25 = 65^{\circ}$	65°	1 correct answer.
	angle in a semi-circle = 90°		1 justification explaining angle in semi-circle is 90°
11b	90 – 65	25°	1 workings not necessary for mark.
11c	$180 - (2 \times 25) = 130^{\circ}$	130°	1
			1 correctly using the isosceles property to identify two equal angles.

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
12a	$2 \times \text{ballpoints} + 3 \times \text{fountain pens}$ = £7.31	2b + 3f = 7.31	1 expressed in words or letters.
	2b + 3f = 7.31		
	$5 \times \text{ballpoints} + 2 \times \text{fountain pens}$ = £9.53	5b + 2f = 9.53	1 expressed in words or letters.
	5b + 2f = 9.53		
12b	2b + 3f = 7.31		1 correct price.
	5b + 2f = 9.53		1 correct price.
	Ballpoint or $b = \pounds 1.27$	Ballpoint or $b = \pounds 1.27$	1 successful
	Fountain pen or $f = \pounds 1.59$	Fountain pen or $f = \pounds 1.59$	elimination or
			SUDSTITUTION.
13a		y = -x + 3	1 all correct.
		$y = \frac{2}{3}x - 2$	1 all correct.
13b	$x + y = 3 \qquad y \qquad 10 \qquad y \qquad $	x = 3	1 mark for correct
	8	y = 0	solutions.
	6		l mark for correct line for
	Intersection (3, 0)		y = -x + 3
			1 mark for correct line for
			$y = \frac{2}{3}x - 2$
	2x - 3y = 6		

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
14	$\frac{272\ 500}{104} = 2620$ $2620 \times 100 = \text{\pounds}262\ 000$	104% £2620 or £2620.19	1 observed that sales price represents 104% 1 correct calculation of 1%
		£262 000 or £262 019	1 correct calculation of original price.
			(3 marks for alternative with correct use of decimal multipliers.)
15a		1, 2, 3, 4, 6, 12	2 all 6 correctly identified.
			(1 mark if 1 or 2 factors omitted.)
15b	12 = 1, 2, 3, 4, 6, 12	4	1
15c	42 42 10 5 2 3	2 × 2 × 3 × 5 × 7	 correct answer (accept numbers in any order). correct factor tree.
16a	$\frac{4}{100} = \frac{1}{25}$	$\frac{1}{25}$	1
16b	$\frac{45}{100} = \frac{9}{20}$	$\frac{9}{20}$	1
16c	$\frac{-625}{1000} = \frac{125}{200} = \frac{5}{8}$	$\frac{125}{200}$	(1 max if stated as final answer)
		$\left \frac{5}{8}\right $	2 if seen no workings required

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
17a	$\frac{\frac{3}{7} + \frac{4}{18}}{\frac{(18 \times 3) + (7 \times 4)}{7 \times 18}} = \frac{\frac{82}{126}}{\frac{126}{63}} = \frac{41}{63}$	<u>41</u> 63	1
17b	$\frac{\frac{2}{9} \times \frac{5}{4}}{\frac{2 \times 5}{9 \times 4}} = \frac{10}{36} = \frac{5}{18}$	<u>5</u> 18	1
17c	$\frac{7}{3} \div \frac{7}{6} = \frac{7}{3} \times \frac{6}{7} = \frac{42}{21} = 2$	4 <u>2</u> 21 2	1
18a	$8 + 4 \times 3 = 8 + 12 = 20$	20	1
18b	$(3 \times 2)^2 + 1 = 6^2 + 1 = 37$	37	1
18c	$(17 - 3) \div (2^2 + 3) =$ 14 ÷ 7 = 2	2	2
19a	$(15 \times 2) + (9 \times 2)$	48 (cm)	1
19b	5 × 3	15 (cm²)	1
19c	$2(5 \times 6) + 2(3 \times 10)$	120 (cm²)	1
19d	15:120 3:24 1:8	1:8	2 (1 max if only 24:3 seen.)
20a	$\frac{7}{35} \times 100 = 20\%$	20%	1 correct answer. 1 clear method.
20b	28:7 4:1	4:1	2 (1 if only 28:7 seen)
20c	$\frac{7}{35-x} = \frac{25}{100}$ $7(100) = 25(35-x)$ $700 = 875 - 25x$ $x = \frac{175}{25} = 7$	7	2 any method that yields correct answer acceptable.
TOTAL			80

Paper 3					
QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE		
1		5700	1		
2a		10x	1		
2b		18z ²	1		
3		1744	1 for start to process e.g. 7850 - 3649 - 2021 (= 2180) 1 for use of fraction e.g. "2180 ÷ 5" or $1 - \frac{1}{5} (= \frac{4}{5})$ 1 for answer.		
4a		(6, 3)	1		
4b		plotted	1		
4c		(2, 3) plotted	1		
5	(500 – 130 – 82 – 18) ÷ 3	90p	1 for start to process. 130 + 82 or 500 – 18 1 for complete process. 1 for 69p or £0.69		
6a		1 <u>3</u> 23	1 for $\frac{13}{a}$ where $a > 13$ or $\frac{b}{23}$ where $b < 23$ or correct fraction for boy from a different class. 1 for full correct answer.		
6b		No + reason	 1 for complete method to find the sum of the signed differences in numbers of boys and girls or the totals of boys and girls in Year 10 1 'No' with correct argument e.g. there are 38 boys and 38 girls. 		
6c		No + reason	1 'No' with e.g. as many calculations using the angles would be required or equivalent.		

QUESTION	WORKING						ANSWER	MARKS AND GUIDANCE
7a							14	1
7b	6 + 6 = 12						3	1 for start of method.
	12 ÷ 4	= 3						1 for answer.
7c	In Out	0	1	2	3	4	2	1 for complete method that leads to answer e.g. table of values or $x = 4x - 6$
			-					1 for 2 or statement that the equation has a unique solution.
8							23	1 for start to method e.g. 5×8 or $8 \div 3.5$
								1 for complete method to find number of 2 litres in 1 gallon or 5 gallons.
								1 accept answers in the range 22.7–23 inclusive, or exact answer of 22.8(5714)
9							425.6	1 for 1.52 × 280 oe
								1 for answer.
10	0.259, 0.2857 , 0.284, 0.2777			7	0.259, $\frac{5}{18}$, 28.4%, $\frac{2}{7}$	1 for convert numbers to common format e.g. decimal places to at least 3 d.p.		
								1 for answer.
11a							23	1
11b							25	1
12							160	1 for start to process e.g. $240 \div 3 \text{ or } 240 \div 4 \text{ or } 240 \div 12$
								1 correct answer only.
13a							65	1
13b							Two base angles of isosceles triangle are equal.	1
13c	180 – 360 –	65 = 1 115 -	115, 48 – 1	27 = 7	70		70	 follow through their '65' from part b, for a correct process to find angle ABE for answer.

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
14	$2250 \div 5 = 450$ $2400 - 4 \times 450 = 600$ $600 \div 3$	Jar of coffee 200 g, tub of butter 450 g	 for 450 (mass of butter). to find the total mass of jars of coffee. process to find mass of jar of coffee. for 200 (mass of coffee).
15	$35 \div 5 \times 3 = 21$ $44 \div 4 = 11$ $\frac{11}{21 + 11}$	<u>11</u> 32	1 process to find number of boys walking and number of girls walking. 1 complete process to find probability. 1 $\frac{11}{32}$ oe
16		23.6111	 for conversion of km to metres or hours to minutes. for conversion of hours to seconds. accept answers in the range of 23.6–24 inclusive.
17a	4y + 4y + 4y - 2x + 4y - 2x	Shown	 for method to acquire correct inside lengths. for completion.
17b	16y and 4x are multiples of 2 Their difference must be a multiple of 2 Or $2(8y - 2x)$	Shown	 for method to start argument e.g. factorise expression. for complete argument.
18	Area of rectangle + area of triangle = $5 \times 4 + (12 - 4) \times 5 \times \frac{1}{2}$ = 40 Area of two quarter circles = $\frac{1}{2} \pi r^2$ = $\frac{1}{2} \times 3.14 \times 2^2$ = 6.28 Area of shaded region = $40 - 6.28$ = 33.72	33.7	 method to find area of trapezium or circle. process to find area of quarter circle (÷4) process to find area of the shaded region. in range 33.7–33.72 inclusive.

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
19a	660 × 1.47	970	1 660 × 1.47
			1 for answer.
19b	$150 \div 3 \times 2 = 100$ or $100 \div 2 \times 3 = 150$	Shown	1 for correct method to convert cost in UK to euro or vice versa, using Ivo's approximation.
			1 shown with correct calculations.
19c		Correct evaluation	1 for an evaluation, e.g. it is sensible as he can do the calculation without a calculator and 3 euros to £2 is a good approximation.
20a	13, 21, 34, 55	55	1 correct answer only.
20b	a, b, a + b, a + 2b, 2a + 3b, 3a + 5b, 5a + 8b	Shown	1 method to show by adding pairs of successive terms.
			$1 \ 3a + 5b, \ 5a + 8b$ shown
20c	5a + 8b = 84	<i>a</i> = 4	1 process to set up 2
	a + b = 12	<i>b</i> = 8	1 process to solve equations
	5a + 5b = 60		1 for both correct terms
	b = 8, a = 4		
21a		Positive correlation	1 positive correlation or description of a positive correlation e.g. maths results increase as science results increase.
21b	Line of best fit drawn	Answer from their line	1 line must be straight and drawn in an appropriate place on the diagram.
			1 answer must be taken from use of line of best fit.
21c		The line of best fit would have to be used outside the data	1 convincing explanation.

QUESTION	WORKING	ANSWER	MARKS AND GUIDANCE
22	$\frac{190 \times 365}{1000} = 69.35$ $\frac{69.35 \times 75.66}{69.35 \times 75.66} = 52.47$	Have a water meter (from working with correct figures)	1 process to find number of litres e.g. 190 ÷ 1000
	$\frac{100}{52.47} = 52.47$ 52.47 + 32.5 = 84.97		1 full process to find cost per day.
			1 full process to find total cost of water used per year (accept use of alternative time period for both options).
			1 full process with consistent units for total cost of water.
			1 correct decision from correct figures.
23a	$\frac{324-240}{240} \times 100$	35	1 for complete method.
	2.10		1 for answer.
23b	$\frac{324 \text{ (mill)}}{5000}$ = £0.0648 million per worker for company A	Company B + evidence	1 method to find sales/ person for A or B for 2016.
	$\frac{72 \text{ (mill)}}{610} = \pounds 0.118 \text{ million per worker}$		1 £64 800 or £118 032.79
	for company B		1 company B with £64 800 and £118 032.79
TOTAL			80







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