



NCFE Level 1 Functional Skills Qualification in Mathematics (603/5055/6)

Mark scheme: P002131 OS 24

Assessment window: On demand

v1.5 Post-standardisation

Examiner Mark Scheme Guidance

Information

This guidance is intended to support NCFE examiners in the valid, reliable and consistent application of the relevant mark scheme version, against learner evidence generated during their external assessment.

This mark scheme provides:

- the total marks available for each question
- the subject content reference for each mark
- example process/methods and evidence of the types of responses expected for each mark
- (once confirmed) the pass mark for the relevant assessment version.

This mark scheme **must** be used for paper-based and online marking of the assessment version indicated.

Instructions and guidance on application

- All learners must receive the same treatment and should be marked fairly. Examiners must mark the first learner in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Learners must be rewarded for what they have shown they can do rather than penalised for things they have not done.
- Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Half marks must not be awarded.
- Examiners should be prepared to award zero marks if the learner's response is not worthy of credit according to the mark scheme.
- The mark scheme is a working document and may be added to at the standardisation to reflect valid alternative answers given by a learner.
- When in doubt regarding the application of the mark scheme to a learner's response, the Chief Examiner must be consulted.

This mark scheme provides the following information:

- section and activity information
- question number
- total marks available per question (top row, shaded) followed by
- attribution of individual marks per question
- problem solving (PS) and underpinning skill (UPS) attribution
- process/method or answers, as well as additional or alternative evidence; indicative of the subject content (SC) attribution
- any additional guidance, as required.

To support the valid, reliable and consistent marking of learner evidence, the following abbreviations are applied throughout the mark scheme:

Annotation	Explanation and use
FT	Follow through marks are applied when there are earlier arithmetic mistakes in the method.

OE	Or equivalent marks are available for the justification of the answer being presented in a different form to the mark scheme i.e. 0.5 or ½.
CAO	Correct answer only.
Their	'Their' refers to the learners' own derived values.
Seen	Seen refers to the requirement to see the stated value in the learner's response or working out.
Imp	Implied refers to the learner's response implying correct working out used but not seen.
Brackets	Indicates units are not required on final answers or for answers seen within working.
BOD	Benefit of doubt where learner handwriting may be difficult to interpret but previous working may indicate correct final answer.
Shaded	Indicates requirements for full marks to be awarded.
Coloured SC box	On-screen only: indicates where SC ref will appear out of order in the Learning Outcomes marking screen

Version Control

Mark schemes are subject to version control. Examiners **must** ensure they have access to the latest version following each standardisation event.

Over time mark schemes will incorporate additional evidence captured and confirmed during standardisation events. Any additional evidence criteria will be captured in colour-coded text applicable to the dated standardisation event.

Recording of marks

Paper-based: Individual marks should be annotated in the 'Examiner' column in the learner script, added up and recorded at the end of each activity. The overall marks awarded for each learner should be clearly and legibly recorded in the grid on the front of the learner script.

Online: Onscreen marking tools (i.e. ticks, crosses) marks should be applied to indicate application throughout the learner script, in addition to marks being recorded numerically within the corresponding 'Learning Outcomes' box, indicated by the relevant Subject Content reference.

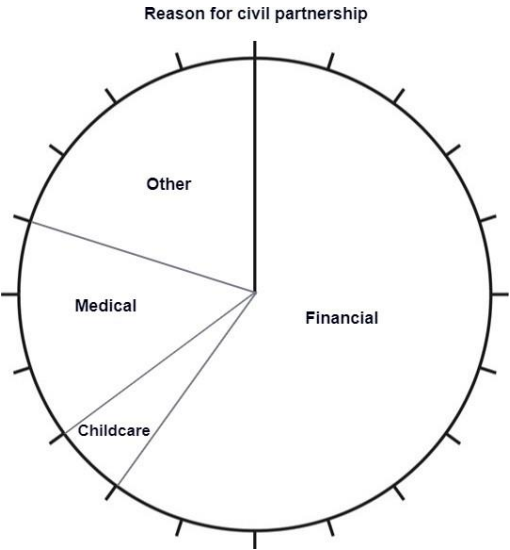
Annotation	Explanation and use
Tick	Used to indicate correct values/method or final answer.
Red highlight	Used to indicate where the learner has made an error in either the value used or an incorrect calculation.
Red line box	Used to indicate where the learner may have made an error that has resulted in benefit of doubt being applied i.e. transposition of figures but previous working clearly shows otherwise.

Paper number: P002131			Version: 1.5	Pass mark: 36	
(Section A) Activity 1: Hardware store			(Non-calculator Test)		
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
1 (a)	1	PS	No AND (£)27 OR No AND (£)3 less	OE No supported by correct working	N7
1 (b)	3	UPS	See below		
	1		2.2 AND 3.9	CAO Rounded values	N15
	1		8.58	FT the correct answer to their 2.2 × their 3.9 for values below only if 1 st mark not awarded Only accept use of 2.1, 4(.0), 2.18, 2.181, 3.91 or 3.912 8.50(59) from 2.181 × 3.9 8.52(771) from 2.181 × 3.91 8.53(2072) from 2.181 × 3.912 8.50(2) from 2.18 × 3.9 8.52(38) from 2.18 × 3.91 8.52(816) from 2.18 × 3.912 8.60(2) from 2.2 × 3.91 8.60(64) from 2.2 × 3.912 8.72(4) from 2.181 × 4(.0) 8.72 from 2.18 × 4(.0) 8.19 from 2.1 × 3.9 8.21(1) from 2.1 × 3.91 8.22(78) from 2.1 × 3.918 8.4 from 2.1 × 4 8.8 from 2.2 × 4 Accept values correctly rounded or truncated to a min of 2 dp Do not accept rounding of 8.53(2072) from accurate calculation seen 8.58 implies 1 st mark	N11b
	1		8.6	FT Correct rounding of their answer to accurate values from a minimum of 2dp seen' 2.2 × 3.9 or their 2.2 × their 3.9 using only 2.1, 4(.0), 2.18 or 3.91 or one of accurate values. Do not accept rounding of 8.53(2072) from 2.181 × 3.912 seen. Award this mark only if seen without working	N12
1 (c)	2	UPS	$\frac{9}{16} \cdot \frac{19}{32} \cdot \frac{5}{8}$	Award 2 marks if correct answer given	
	1		$\frac{18}{32}$ and $\frac{20}{32}$	OE Allow any fractions which allow a direct comparison	N8b

				Values with more than 2 decimal places are not expected at level 1 but award mark for 0.56(25) and 0.59(375) and 0.6(25) or 56(.25) (%) and 59(.375) (%) and 62(.5) (%) Allow method of finding a fraction of the same value	
	1		$\frac{9}{16}, \frac{19}{32}, \frac{5}{8}$	CAO	N8b
1 (d)	3	PS	51 (packs)	Award 3 marks if correct answer given from correct methods and accurate values if working seen	
	Alternative method 1 – Divide by 3 first				
	1		1524 ÷ 3 or 508 (pipes)	OE Any full correct method to work with proportion	N17
	1		50.8	Correct answer to their 508 ÷ 10 FT their 508 ÷ 10 from correct method seen 50.8 implies 1 st mark	N3b
	1		51 (packs)	CAO	N12
	Alternative method 2 – Divide by 10 first				
	1		152.4	CAO	N3b
	1		Their 152.4 ÷ 3 or 50.8	OE Any correct method to work with proportion FT their 152.4 if correct method seen 50.8 implies 1 st mark	N17
	1		51 (packs)	FT Their 50.8 rounded up from a minimum of 1dp seen only if either of the 1st two marks not awarded	N12
	Alternative method 3 – Multiply by 10 first				
	1		30	CAO 30 from 3 × 10	N3b
	1		1524 ÷ their 30 or 50.8	OE Any correct method to work with proportion FT Their 30 if correct method seen 50.8 implies 1 st mark	N17
	1		51 (packs)	FT Their 50.8 rounded up from a minimum of 1dp seen only if either of the 1st two marks not awarded	N12
	1 (e)	6	PS	See below	
Alternative method 1 – Perimeter first then multiply by 10					
1			11.26 + 7.4 + 7.4 – 0.9	OE Any full correct method to find relevant perimeter	M22b
	1		25.16 (m)	CAO	N11a

1		251.6 (m)	FT Correct answer to their 25.16 × 10 Their 25.16 must come from correct method for perimeter Accept 252 rounded up from 251.6 seen	N3a
1		Their 251.6 ÷ 1.6 OR their 252 ÷ 1.6	OE Any full correct method to work with proportion FT Their 251.6 from an attempt to find perimeter Allow one dimension missing or gate width included Allow their 251.6 correctly rounded up to the nearest whole number	N17
1		157.2(5) or 157.3 OR 157.5	CAO Number of panels	N11b
1		158 (panels)	FT Their 157.2(5) or 157.3 or their 157.5 provided it is a decimal, correctly rounded up to the nearest whole number Accept the correct answer to their 251.6 ÷ 1.6 rounded up to nearest whole number and × 10 Award 1 mark only for 158 seen without working	N12
Alternative method 2 – Multiply by 10 first then perimeter				
1		112.6 or 74 or 9	CAO Accept the correct answer to any combinations of any dimensions multiplied by 10 eg 148 from (7.4 + 7.4) × 10	N3a
1		Their 112.6 + their 74 + their 74 – their 9	OE Any full correct method to find relevant perimeter FT Their 112.6 and their 74 and their 9 from correct method to × 10 if seen	M22b
1		251.6 (m)	FT Correct answer to their 112.6 + their 74 + their 74 – their 9 from an attempt to find relevant perimeter Allow one dimension missing or gate width included Accept 252 rounded up from 251.6 seen	N11a
1		Their 251.6 ÷ 1.6 OR their 252 ÷ 1.6	OE Any full correct method to work with proportion FT Their 251.6 Allow their 251.6 correctly rounded up to the nearest whole number	N17
1		157.2(5) or 157.3 OR 157.5	CAO	N11b
1		158 (panels)	FT Their 157.2(5) or 157.3 or their 157.35 provided it is a decimal, correctly rounded up to the nearest whole number Accept the correct answer to their 251.6 ÷ 1.6 rounded up to nearest whole number and × 10 Award 1 mark only for 158 seen without working	N12
Alternative method 3 – Working out the number of fence panels for one garden with perimeter first				

1		$11.26 + 7.4 + 7.4 - 0.9$	OE Any full correct method to find relevant perimeter	M22b
1		25.16 (m)	CAO Accept 25.2 rounded up from 25.16 seen	N11a
1		Their $25.16 \div 1.6$ OR their $25.2 \div 1.6$	OE Any full correct method to work with proportion FT Their 25.16 or 25.2 from correct methods	N17
1		15.72(5) or 15.73 OR 15.75	FT Correct answer to their $25.16 \div 1.6$ from correct methods Answers with 3 decimal places are not expected at Level 1 but award mark if seen	N11b
1		157.2(5) or 157.3 OR 157.5	CAO	N3a
1		158 (panels)	FT Their 157.2(5) or 157.3 or their 157.5 provided it is a decimal correctly rounded up to the nearest whole number Accept the correct answer to their $251.6 \div 1.6$ rounded up to nearest whole number and $\times 10$ Award 1 mark only for 158 seen without working	N12
Alternative method 4 – Dividing each dimension by 1.6 first				
1		$11.26 \div 1.6$ OR $7.4 \div 1.6$ OR $(7.4 - 0.9) \div 1.6$	OE Any correct method to divide one length of fencing by 1.6	N17
1		7.0375 OR 4.625 OR 4.0625	CAO Decimals with more than 3dp are not expected at Level 1 but award mark if seen	N11b
1		Their 7.03(75) + their 4.62(5) + their 4.06(25)	OE Any correct method to add number of panels per side Accept $7 + 4.6 + 4$	M22b
1		15.7(25) or 15.73	CAO Number of fence panels for one garden Accept 15.6 Accept 16 rounded up from 15.7(25) or 15.73 seen	N11a
1		157.2(5) or 157.3	CAO Accept 160 from their 16×10	N3a
1		158 (panels)	FT Their 157.2(5) or 157.3 provided it is a decimal correctly rounded up to the nearest whole number Accept the correct answer to their $7.03(75) + their 4.62(5) + their 4.06(25)$ rounded up to nearest whole number and $\times 10$ Award 1 mark only for 158 seen without working	N12

(Section B) Activity 2: Civil partnership			(Calculator Test)		
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
2 (a)	1	UPS	9.6	CAO	N1b
2 (b)	4	PS	See below	Award 4 marks for fully correct pie chart	
	1		At least 2 angles correct	Implied by pie chart with 2 correct sectors Mark intention	H27b
	1		All angles correct	216°, 18°, 54° and 72° implied by pie chart with sectors 12, 1, 3 and 4 Mark intention	H27b
	1		At least 2 sectors correct	FT Their angles only if they sum to 360° Mark intention	H27b
	1		All sectors correct with correct labels on or near sectors	Mark intention	H27b
<p>Additional Guidance</p> 					
2 (c)	5	PS	See below	Award 5 marks if correct answer given from correct methods and accurate values	
	Alternative method 1 – Find mean first then percentage				
	1		$(22\,258 + 19\,540 + 20\,410 + 21\,936) \div 4$ OR $84\,144 \div 4$	OE Any full correct method to find mean Allow $22\,258 + 19\,540 + 20\,410 + 21\,936 \div 4$ if seen Allow one transposition error	H29a
	1		(£)21 036	CAO mean	H29a
1		Their $21\,036 \times 0.05$ or 1051.8 OR $175.23 \div 0.05$ or 3504.6	OE Any full correct method to work with percentage FT Their 21 036 from correct method to find mean	N14	

			Reverse % method not expected at Level 1 but award mark if seen 1051.8 implies 1 st two marks Allow one transposition error to find mean	
1		175.23 × 6 or 1051.38 OR their 1051.8 ÷ 6 or 175.3 OR their 3504.6 × 6 or 21 027(.6) or 21 028	OE Any full correct method to work with proportion FT Their 1051.8 from an attempt to find mean and 5% Allow one transposition error to find mean or allow any single data item from table ÷4 For percentage method allow ÷ 10 or ÷ 10 twice or ÷ 10 × 2 OE FT Their 3504.6 from correct method to find reverse percentage 175.3 implies 1 st three marks	N17
1		Yes AND (£)1051.8(0) and (£)1051.3(8) or (£)1051.4(0) OR Yes AND (£)175.3(0) OR Yes AND (£)21 036 and (£)21 027(.6) or (£)21 028	OE Yes supported by correct working	N10
Alternative method 2 – Find mean first then proportion				
1		(22 258 + 19 540 + 20 410 + 21 936) ÷ 4 OR 84 144 ÷ 4	OE Any full correct method to find mean Allow 22 258 + 19 540 + 20 410 + 21 936 ÷ 4 if seen Allow one transposition error	H29a
1		(£)21 036	CAO mean	H29a
1		their 21 036 ÷ 6 or 3506 OR 175.23 × 6 or 1051.38	OE Any full correct method to work with proportion FT their 21 036 from correct method to find mean 3506 implies 1 st two marks Allow one transposition error to find mean	N17
1		Their 3506 × 0.05 or 175.3 OR their 1051.38 ÷ 0.05 or 21 027(.6) or 21 028 OR their 1051.38 ÷ their 21 036 × 100 or 4(.998...) (%)	OE Any full correct method to work with percentage FT Their 3506 from an attempt to find mean and a correct method to divide by 6 Allow one transposition error to find mean Allow any single data item from table ÷4 Allow their 21 036 × 6 or 175.23 ÷ 6 FT Their 1051.38 from correct method to multiply by 6 Reverse % or expressing one value as a % of another not expected at level one but award mark if seen 175.3 implies 1 st three marks	N14
1		Yes AND (£)175.3(0) OR	OE Yes supported by correct working	N10

		Yes AND (£)21 036 and (£)21 027(.6) or (£)21 028 OR Yes AND 4(.998...) (%)		
Alternative method 3 – Find percentage first then mean				
1		Any 2 of: 22 258 × 0.05 or 1112.9 19 540 × 0.05 or 977 20 410 × 0.05 or 1020.5 21 936 × 0.05 or 1096.8	OE Any pair of amounts × 0.05	N14
1		(22 258 + 19 540 + 20 410 + 21 936) × 0.05 or 4207.2	OE Any full correct method 4207.2 implies 1 st mark Allow one transposition error in data values to find mean	H29a
1		1051.8	CAO 5% of mean 1051.8 implies 1 st two marks	H29a
1		175.23 × 6 or 1051.38 OR their 1051.8 ÷ 6 or 175.3	OE Any full correct method to work with proportion FT Their 1051.8 from an attempt to find 5% of the mean For percentage method allow ÷ 10 or ÷ 10 twice or ÷ 10 × 2 of a single data item OE Allow one transposition error of data items × their percentage method to find mean or allow any single data item × their percentage method ÷4 175.3 implies 1 st three marks	N17
1		Yes AND (£)1051.8(0) and (£)1051.3(8) or (£)1051.4(0) OR Yes AND (£)175.3(0)	OE Yes supported by correct working	N10
Alternative method 4 – Apply proportion before finding mean value				
1		(22 258 + 19 540 + 20 410 + 21 936) ÷ 4 OR 84 144 ÷ 4	OE Any full correct method to find mean Allow 22 258 + 19 540 + 20 410 + 22 936 ÷ 4 if seen Allow one transposition error	H29a
1		Their 84 144 ÷ 4 ÷ 6	OE Any correct method to apply proportion Allow one transposition error to find mean	N17
1		3506	CAO 3506 implies 1 st two marks	H29a
1		Their 3506 × 0.05 or 175.3 OR 175.23 ÷ 0.05 or 3504(.6) or 3505 OR 175.23 ÷ their 3506 × 100 or 4(.998...) (%)	OE Any correct method to find 5% FT their 3506 from a correct method to apply proportion and an attempt to find mean Allow one transposition error to find mean or allow any single data item from table ÷4 Allow their mean value × 6	N14

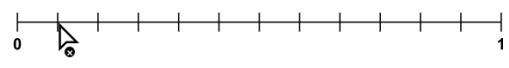
				Reverse % or expressing one value as a % of another not expected at level one but award mark if seen 175.3 implies 1 st three marks													
	1		Yes AND (£)175.3 OR Yes AND (£)3506 and (£)3504(.60) or (£)3505 OR Yes AND 4(.998...) (%)	OE Yes supported by correct working	N10												
2 (d)	1	PS	Yes AND 28 (years) OR Yes AND 2 years less (than 30 years)	OE Yes AND 28 (years) OR Yes AND 2 years less (than 30 years)	H29b												
2 (e)	2	UPS	See below	Award 2 marks for fully correct table													
	1		3 frequencies correct OR 4 frequencies with 2 correct frequencies which sum to 20	20 does not need to be seen in total row	H28a												
	1		Fully correct table		H28a												
<p>Additional guidance 30, 32, 33, 35, 38, 38, 39, 40, 40, 41, 41, 42, 43, 44, 45, 46, 48, 50, 55, 58</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Age</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>25 – 34</td> <td>3</td> </tr> <tr> <td>35 – 44</td> <td>11</td> </tr> <tr> <td>45 – 54</td> <td>4</td> </tr> <tr> <td>55 – 64</td> <td>2</td> </tr> <tr> <td>Total:</td> <td>20</td> </tr> </tbody> </table>						Age	Frequency	25 – 34	3	35 – 44	11	45 – 54	4	55 – 64	2	Total:	20
Age	Frequency																
25 – 34	3																
35 – 44	11																
45 – 54	4																
55 – 64	2																
Total:	20																
2 (f)	2	UPS	$\frac{24}{100}$ AND 0.24	Award 2 marks if correct answer given													
	1		$\frac{24}{100}$ OR 0.24	CAO One correct value seen for fraction/decimal (with or without an incorrect value for decimal/fraction) May be in incorrect answer box OE Fraction eg $\frac{6}{25}$	N16												
	1		$\frac{24}{100}$ AND 0.24	OE Fraction May be in incorrect boxes FT Correct answer from their fraction or their decimal if mark 1 not awarded	N16												

Activity 3: Upcycling			(Calculator Test)		
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
3 (a)	1	UPS	Any pentagon drawn	CAO Mark intention Does not have to be regular	M24a
3 (b)	3	PS	10 (square metres)	Award 3 marks if correct answer given from correct methods and accurate values if working seen	
	1		1.3×1.3 or 1.69	OE Any full correct method to find area of one face May be seen in a subsequent calculation	M22a
	1		$1.3 \times 1.3 \times 6$ or 10.14 (m ²) OR their 1.69×6 or 10.14 (m ²)	FT Their 1.69 from correct method for area 10.14 implies 1 st mark Accept use of 1.7 for area, may be implied by 10.2 (m ²) Accept use of 2 rounded from 1.69 seen	N5
	1		10 (square metres)	CAO	N12
3 (c)	2	PS	No AND 1.5 (m) OR No AND 0.6 (cm) OR No AND (1 cm represents) 3.6	Award 2 marks if correct answer given from correct methods and accurate values if working seen	
	1		3×0.5 or 1.5 (m) OR $1.8 \div 3$ or 0.6 (cm) OR $1.8 \div 0.5$ or 3.6 or (scale factor) 1 : 3.6	OE Any full correct method	M21
	1		No AND 1.5 (m) OR No AND 0.6 (cm) OR No AND (1 cm represents) 3.6	OE No supported by correct working	M21
3 (d)	4	PS	6 (tins)	Award 4 marks if correct answer given from correct methods and accurate values if working seen	
	1		$20 \times 15 \times 5$ or 1500 (cm ³)	OE Any full correct method to find volume OE consistent units	M23
	1		1.5 (litres) OR 250 (ml)	CAO 1.5 (litres) implies 1 st mark	M20c
	1		Their $1.5 \div 0.25$ OR their $1500 \div$ their 250	OE Any correct method to work with proportion FT Their 1.5 from correct method to find volume and from an attempt to convert if seen Allow their volume $\div 1000$ or $\times 1000$ FT their 1500 from correct method to find volume and from an attempt to convert Allow $0.25 \div 1000$	N17
	1		6 (tins)	CAO	M23

3 (e)	2	PS	(£)159.80	Award 2 marks if correct answer given from correct methods and accurate values if working seen	
	1		188 × 0.85 or 159.8 OR 188 × 0.15 or 28.2	OE Any full correct method to find discount or total after the discount	M19
	1		(£)159.80	CAO 2dp required	M19
3 (f)	2	PS	Black AND $\frac{8}{20}$ OR Black AND 0.35 and 0.4 OR Black AND 35(%) and 40(%)	Award 2 marks if correct answer given	
	1		$\frac{8}{20}$ OR 0.35 and 0.4 OR 35(%) and 40(%)	OE Accept any fractions which allow a direct comparison Allow method of finding fraction OE of the same value	H30b
	1		Black AND $\frac{8}{20}$ OR Black AND 0.35 and 0.4 OR Black AND 35(%) and 40(%)	OE Black supported by correct working	H30b
3 (g)	1	UPS	All 3 lines of symmetry drawn	CAO Mark intention	M24b

Activity 4: Concert arena			(Calculator)		
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
4 (a)	1	UPS	21 000	CAO	N1a
4 (b)	3	PS	108 (staff)	Award 3 marks if correct answer given from correct methods and accurate values	
	Alternative method 1 – Percentage first				
	1		5400×0.6 or 3240	OE Any full correct method to find percentage	N14
	1		Their $3240 \div 30$	OE Any full correct method to apply ratio FT their 3240 from correct method	N17
	1		108 (staff)	CAO	N14
	Alternative method 2 – Ratio first				
	1		$5400 \div 30$ or 180	OE Any full correct method to apply ratio	N17
	1		Their 180×0.6	OE Any full correct method to find percentage FT their 180 from correct method	N14
	1		108 (staff)	CAO	N14
	4 (c)	4	PS	See below	Award 4 marks if correct answer given from correct methods and accurate values
Alternative method 1 – Forward process, fraction first					
1			$\frac{5}{9}$	CAO May be seen or implied in subsequent calculations	N8a
1			$72 \times 5 \div 9$ or 40 (ticket holders)	OE Any full correct method to find fraction of integer 40 implies 1 st mark Accept use of $72 \times 0.55(\dots)$	N9
1			Their 40×0.45 or 18 OR 11 $20 \div 0.45$ or 44(.444...) OR $20 \div$ their 40 or 50(%)	OE Any full correct method to find percentage of their 40 FT Their 40 from correct method to find fraction Reverse percentage or percentage difference not expected at L1 but award mark if seen 18 implies 1 st two marks	N14
1		No AND 18 (T-shirts) OR No AND 44(.444...) and 40 (tshirts) OR No AND 50(%)	OE No supported by correct working Do not accept 17.82 from 0.55. Do not accept 18.14 from 0.56.	N9	

Alternative method 2 – Forward process, percentage first				
1		$\frac{5}{9}$	CAO May be seen or implied in subsequent calculations	N8a
1		72×0.45 or 32.(4)	OE Any full correct method to find percentage of 72 Accept 32	N14
1		Their $32.4 \times 5 \div 9$ or 18	OE Any full correct method to find fraction of their 32.4 Accept method to find fraction of 32 or 17.7(777...) Infinite decimals not expected at Level 1 but award mark if seen 18 or 17.7(777...) implies 1 st two marks	N9
1		No AND 18 (T-shirts)	OE No supported by correct working Do not award if 18 from 17.7(777...) rounded up	N9
Alternative method 3 – Reverse process [not expected at Level 1]				
1		$\frac{5}{9}$	CAO May be seen in subsequent calculation	N8a
1		$20 \div 0.45$ or 44(.444...)	OE Any correct method to find total number of people to meet the band Decimals with more than 2dp are not expected at Level 1 but award mark if seen 44(.444...) implies 1 st mark	N14
1		$44(.444...) \times 9 \div 5$ or 80 (ticket holders)	OE Any full correct method to apply reverse fraction Accept correct value from correct rounding of 44(.444...) 80 implies 1 st two marks	N9
1		No AND 80 (gold ticket holders required)	OE No supported by correct working Accept correct value from correct rounding of 44(.444...)	N9
4 (d)	3	PS See below	Award 3 marks if correct answer given from correct methods and accurate values	
Alternative method 1 – Converts times to consistent units 20 mins 1.75 hours 5.15 and 7.30				
1		0.33 (333...) (hrs) OR 1 (hr) 45 (mins) or 105 (mins) OR 2.25 (hrs) or 2 (hr) 15 (mins) or 135 (mins) OR 2 (hrs) 5 (mins) or 125 (mins)	OE Any 1 valid time conversion or total time required or total time available Infinite decimals not expected at Level 1 but award mark if seen Do not award mark for incorrect use of decimal eg 1.45 2.25 (hrs) OE from 7.30 – 5.15 2 (hrs) OE from 20 (mins) + 1.75 (hrs) OE	M20e
1		2 (hr) 15 (mins) and 2 (hrs) 5 (mins) OR 2.25 (hrs) and 2.08(333...) (hrs) OR 135 (mins) and 125 (mins) OR	OE Any comparable correct times in consistent format or correct start time or end time Infinite decimals not expected at Level 1 but award mark if seen Correct time(s) implies 1 st mark	M20e

			7.20 (pm) OR 5.25 (pm)	Do not award mark for incorrect use of decimal eg 1.45 7.20 from 5.15 + 2 (hrs) 5 (mins) 5.25 from 7.30 – 2 (hrs) 5 (mins) Award mark for 19:20 or 17:25 Accept eg 7:20 (pm) format Correct time(s) implies 1 st two marks	
	1		Yes AND 2 (hr) 15 (mins) and 2 (hrs) 5 (mins) OR Yes AND 2.25 (hrs) and 2.08(333...) (hrs) OR Yes AND 135 (mins) and 125 (mins) OR Yes AND 7.20 (pm) OR Yes AND 5.25 (pm)	OE Yes supported by correct working FT correct decision from their values Do not award mark for incorrect use of decimal eg 1.45 Award mark for 19:20 or 17:25 Accept eg 7:20 (pm) format	M20e
Alternative method 2 – Add or subtract times					
	1		5.35 (pm) or 7(.00) (pm) OR 7.10 (pm) or 5.45 (pm)	OE Correct answer to adding one time onto 5.30 (pm) or subtracting one time from 7.30 (pm) Or one incorrect calculation followed by a correct calculation e.g. 7.50 (pm) from 5.15 (pm) + 1.75 = 7.30(pm) then 7.30 (pm) + 20 mins = 7.50 (pm) 5.35 (pm). 7(.00) (pm), 7.10 (pm) or 5.45 (pm) must come from correct method shown below if seen 5.35 (pm) from 5.15 (pm) + 20 mins 7 (pm) from 5.15 (pm) + 1.75 hours 7.10 (pm) from 7.30 (pm) – 20 mins 5.45 (pm) from 7.30 (pm) – 1.75 hours Accept eg 5:35 (pm) format	M20e
	1		7.20 (pm) OR 5.25 (pm)	OE Correct required start time or end time 7.20 (pm) from 5.15 (pm) + 20 mins + 1.75 hrs 5.25 (pm) from 7.30 (pm) – 20 mins – 1.75 hrs 7.20 (pm) or 19:20 or 5.25 (pm) or 17:25 implies 1st mark Accept eg 7:20 (pm) format	M20e
	1		Yes AND 7.20 (pm) OR Yes AND 5.25 (pm)	OE Yes supported by correct working FT correct decision from their values Award mark for 19:20 or 17:25 Accept eg 7:20 (pm) format	M20e
4 (e)	2	UPS	See below		
4 (e) (i)	1		$\frac{6}{72}$ or $\frac{3}{36}$ or $\frac{1}{12}$	CAO OE fraction	H31
4 (e) (ii)	1			FT Their $\frac{6}{72}$ if $0 <$ their $\frac{6}{72} \leq 1$ if mark in 4ei not awarded Mark intention	H30a

				Must FT from fraction in 1 st mark. Correct scale indication implies 1 st mark, only if no fraction given	
4 (f)	2	PS	1800 (seats)	Award 2 marks if correct answer given	
	1		72 x 25	OE Any full correct method	N4
	1		1800 (seats)	CAO	N4