wjec cbac

GCSE MARKING SCHEME

AUTUMN 2020

GCSE MATHEMATICS - NUMERACY UNIT 1 – FOUNDATION TIER 3310U10-1

INTRODUCTION

This marking scheme was used by WJEC for the 2020 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

WJEC GCSE MATHEMATICS - NUMERACY

AUTUMN 2020 MARK SCHEME

GCSE <i>Mathematics Numeracy</i> Unit 1: Foundation Tier	Mark	Comments
1(a) (i) an even chance	B1	
1(a) (ii) 18	B1	
1(a) (iii) 16	B1	
1(b) 8007	B1	
1(c) No and a suitable explanation given indicating that the length of a pool cannot be 25 miles long. Eg No because 25 miles is far too long for a swimming pool No because he means 25 metres for the length of a pool 'No, the pool cannot be 25 miles long' 'No because it's metres not miles' 'No because the pool is 25 metres not miles'	E1	Allow Eg 'No, the pool is not 25 miles long' 'No, because 1 length doesn't equal 25 miles' 'No because the length of a swimming pool is not 25 miles' 'No because 25 miles would be far too big to swim' Do not accept 'No because we were not given the distance for a length' 'No because we don't know the length of a pool' 'No because there are 15 miles in a length.'
1(d) cylinder	B1	
1(e) (13:30) (13:55) 14:20 14:45 (15:10) 15:35	B2	Accept times given in 12 hour and/or 24 hour format Award B2 for all 3 times correct Award B1 for 1 or 2 times correct For B1, FT 'their 14:20' + 25 minutes correctly evaluated provided both times lie between 13:55 and 15:10
2(a) 11	B1	
2(b) (size) 8	B1	
2(c) (size) 12	B1	
 2(d) No and suitable reason given Eg 'No because you increase by 2 each time' 'No because 5 isn't double 3' 'No, the rule is +2 (not × 2)' 'No, because if you double the circles in size 2 you get 10 which isn't 7 circles in size 3.' 'No because you just add on 2 to the number of circles before it.' 'No because you add the size number + size number + 1' 'No because to get size 3 you add 3 and 4' 	E1	Allow 'No because size 1 is 3, size 2 is 5 then size 3 is 7 so it isn't doubling' 'No because it goes up by 2'

0		
3. (Money for national children's charity) 1200 ÷ 3 (£)400	M1 A1	
(Money for national animal charity) 20/100 × 1200	M1	
(£)240 (Money for each of the 4 charities) 1200 – 400 – 240 (=560)	A1 M1	FT 'their stated 400' and 'their derived 240' for
÷1	m1	possible M1m1A1
- (0)110		
= (£)140	A1	
Organisation and communication Writing	W1	 For OC1, candidates will be expected to: present their response in a structured way explain to the reader what they are doing at each step of their response lay out their explanations and working in a way that is clear and logical write a conclusion that draws together their results and explains what their answer means For W1, candidates will be expected to: show all their working make few, if any, errors in spelling, punctuation and grammar use correct mathematical form in their working use appropriate terminology, units, etc.
4(a) 1140 (calories)	B1	
 4(b) Yes and suitable reason given Eg Yes because 5.02 and 5.07 are 5 when rounded to the nearest whole number. Yes because 5.02 and 5.07 are only just over 5 Yes because all runs are about 5km or just over 'Yes, they are all about 5km'. 	E1	Allow 'Yes, because they are all under 0.5 and all start with 5' Do not accept the information in the question just repeated, with no inference made. Do not accept: 'No because she ran 3 different routes'
		'No because there are no distances higher than the number' 'Yes because it's 5.07, then 5, then 5.02' 'Yes because they are all somewhere in 5km'
4(c) No and suitable reason given Eg 'No because it took her longer to run 5(km) than it did to run 5.02 (km)' 'No, the 5.02km run took the least time' 'No, the shortest run took longer than the 5.02km run' 'No, the shortest run was on Wednesday but the least time was on Friday'	E1	'No because there are no distances higher than the number' 'Yes because it's 5.07, then 5, then 5.02' 'Yes because they are all somewhere in 5km' Allow 'No, on Friday she ran for longer and took less time' 'No, 33:46 is the middle time' 'No, 5.02 km is the middle distance'
 4(c) No and suitable reason given Eg 'No because it took her longer to run 5(km) than it did to run 5.02 (km)' 'No, the 5.02km run took the least time' 'No, the shortest run took longer than the 5.02km run' 'No, the shortest run was on Wednesday but the least time was on Friday' 4(d) 34:03 – 32:52 or equivalent (e.g. 8 seconds + 1 minute + 3 seconds) 1 minute and 11 seconds or 71 seconds 	E1 M1 A1	 'No because there are no distances higher than the number' 'Yes because it's 5.07, then 5, then 5.02' 'Yes because they are all somewhere in 5km' Allow 'No, on Friday she ran for longer and took less time' 'No, 33:46 is the middle time' 'No, 5.02 km is the middle distance' Answers of 1:51, 2:51, 1:49 and 2:49 imply M1 Allow 1:11

5(a) 35°	B1	
5(b) 53° drawn (±2°) in correct place 78° drawn (±2°) in correct place	B1 B1	If B0, B0 but 53° (±2°) and 78° (±2°) swapped, award SC1
Triangle completed	B1	Award this B1 provided at least one previous B1 or SC1 awarded
Two sides measured correctly (9.5 cm and 11.7 cm)	B2	B1 for each line. Allow ±2 mm. (Range is: 9.3cm to 9.7cm and 11.5cm to 11.9cm) FT their completed triangle This may be implied by their final answers
95 (m) and 117 (m)	B1	(Range is 93m to 97m and 115m to 117m) FT 'their measurements' provided a triangle drawn
		If previous B2 is awarded B0 or B1 then FT for the final B1 for at least one of 'their measurements' × 10 or at least one of 'their measurements rounded to the nearest whole number of cms' × 10
		eg for 8.4cm award final B1 for 80 or 82 to 86
		Note: the 2 answers given must correspond in size to the sides of the triangle.
6. (Cost of strawberries) 20 – 6.8(0) – 1.5 × 4 (£) 7.2(0)	M2 A1	M1 for (Blueberries cost) 1.5×4 (=6) Award M2, A1 for appropriate sight of (£)7.2(0) irrespective of any further inappropriate working
(Mass of strawberries) (20 – 6.8(0) – 1.5 × 4) ÷ 3.6 or 7.2(0) ÷ 3.6	M1	In FT allow sight of 14.2(0) as indication of 20 – 6.8(0) attempted Allow convincing appropriate repeated addition
		FT provided there has been an attempt at a subtraction of the cost of blueberries from 20 - 6.8(0) (=13.2(0)), 20 or 6.8(0) and provided M1 previously awarded, e.g. • (20 - 1.5 × 4) ÷ 3.6 • (6.8(0) - 1.5 × 4) ÷ 3.6 OR FT (20 - 6.8(0) - 'their cost of blueberries') ÷ 3.6 provided 'their cost of blueberries' > (£)4
2 (kg)	A1	CAO. Must be from correct working
		If no marks, award SC1 for an answer of 3.6(6kg) or 3.67(kg) or 3.7(kg) (from (20 – 6.80) ÷ 3.6)
		An answer only of 2 kg is awarded all 5 marks (strictly provided no incorrect working seen - this is answer only). Any other answer only, such as '2 bags', is awarded no marks.

1000) 490 + 12 × 18 + 7 × 52 (450 + 216 + 364) 11 for any one of: • a sum of 2 or 3 of amounts including any two of 450, 12 × 18 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 216 + 365 = £)1031 Use of 365 days leads to (450 + 216 + 365 = £)1020 A1 for sight of 450 + 216 + 365 = £)1020 • 49 weeks leads to (450 + 216 + 365 = £)1020 • 51 weeks leads to (450 + 216 + 365 = £)1020 or • 10 (inches) 12 (inches) 12 (inches) 13.2 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 17.7 (15) 18 1 </th <th>1000) 4su + 12 × 18 + 7 × 52 (450 + 216 + 364) 1450 + 218 and 7 × 52 (450 + 216 + 364) 12 × 18 + 7 × n, where n = 48 to 51 inclusive (450 + 216 + 364) 450 + 7 × n, where n = 48 to 51 inclusive (450 + 216 + 365 = 5)1031 132 × 18 + 7 × n, where n = 48 to 51 inclusive (450 + 7 × n, where n = 48 to 51 inclusive sight of 216 and 364 or 365 or 366 (45) + 7 × n, where n = 48 to 51 inclusive sight of 216 and 364 or 365 or 366 (45) + 7 × n, where n = 48 to 51 inclusive sight of 216 and 540 + 216 + 365 = 5)1031 Use of 365 days leads to (450 + 216 + 365 = 5)1031 Use of 366 days leads to (450 + 216 + 365 = 5)1032 (15) model of 150 + 216 + 361 = 5)1002 14 for sight of 450 + 216 + 363 = 5)1002 (16) model of 160 + 216 + 335 = 5)1003 16 model ocols for 48 to 51 weeks indivise: (17) model of 160 + 216 + 335 = 5)1003 17 model ocols for 48 to 51 model ocols for 49 to 51 weeks indivise: (15) (0) 25 + 2.5 07 model ocols for 48 to 51 model ocols</th> <th>7(a) (Total of first year cost is purchase + insurance +</th> <th>M2</th> <th>Allow food cost of 365 or 366 (from £1 per day)</th>	1000) 4su + 12 × 18 + 7 × 52 (450 + 216 + 364) 1450 + 218 and 7 × 52 (450 + 216 + 364) 12 × 18 + 7 × n, where n = 48 to 51 inclusive (450 + 216 + 364) 450 + 7 × n, where n = 48 to 51 inclusive (450 + 216 + 365 = 5)1031 132 × 18 + 7 × n, where n = 48 to 51 inclusive (450 + 7 × n, where n = 48 to 51 inclusive sight of 216 and 364 or 365 or 366 (45) + 7 × n, where n = 48 to 51 inclusive sight of 216 and 364 or 365 or 366 (45) + 7 × n, where n = 48 to 51 inclusive sight of 216 and 540 + 216 + 365 = 5)1031 Use of 365 days leads to (450 + 216 + 365 = 5)1031 Use of 366 days leads to (450 + 216 + 365 = 5)1032 (15) model of 150 + 216 + 361 = 5)1002 14 for sight of 450 + 216 + 363 = 5)1002 (16) model of 160 + 216 + 335 = 5)1003 16 model ocols for 48 to 51 weeks indivise: (17) model of 160 + 216 + 335 = 5)1003 17 model ocols for 48 to 51 model ocols for 49 to 51 weeks indivise: (15) (0) 25 + 2.5 07 model ocols for 48 to 51 model ocols	7(a) (Total of first year cost is purchase + insurance +	M2	Allow food cost of 365 or 366 (from £1 per day)
The integration of 2 or 3 of amounts including any two of 450, 12 × 18 and 7 × 52.(E) 1030(E) 1030(E) 1030A2(E) 1030(E) 1030(E) 1030A2(E) 1030(E) 1030(E) 1030A2(E) 1030A3(E) 1030A2(E) 1030A3(E) 1030A3(E) 1030A3(E) 1030A3(E) 1030A3(E) 1030A3(E) 1030A1(E) 1030A1(E) 1030A1(E) 1030A1(E) 1030A1<	(a) 1 20 1 20 1 30 1 (c) 1 (c) 1 30 1 (c) 1 ((450 + 216 + 364)		M1 for any one of
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	450, 12 × 18 and 7 × 52 450, 17 × 18 and 7 × 52 (E) 1030 A2 Use of 366 days leads to (450 + 216 + 365 = £)1032 A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive: - 48 weeks leads to (450 + 216 + 336 = £)1002 - 49 weeks leads to (450 + 216 + 336 = £)1023 A1 for sight of 145 × 16 + 37 = £)1023 A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from A02 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts accorectly or have 2 amounts, adamounts accorectly evaluated sum in which at least 2 of the 3 amounts accorectly evaluated sum in which at least 2 of the 3 amounts accorectly ore			• a sum of 2 or 3 of amounts including any two of
* 12 × 18 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • sight of 216 and 364 or 365 or 366 (£) 1030 (5) 10 or 2.5 x 12 (6) 10 weeks leads 10 (450 + 216 + 353 e 2)10.023 (7b)(ii) 25 + 2.5 or 30 + 2.5 (7b)(ii) 6 × 2.2 or 30 + 2.5 (10 (inches) <	(E) 1030 A2 • 12 × 18 + 7 × n, where n = 48 to 51 inclusive • 450 + 7 × n, where n = 48 to 51 inclusive • sight of 216 and 364 or 366 or 366 (E) 1030 A2 Use of 365 days leads to (450 + 216 + 365 = £)1031 Use of 366 days leads to (450 + 216 + 365 = £)1032 A1 for sight of 450 + 216 + 366 = £)1032 A1 for sight of 450 + 216 + 366 = £)1032 A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days (E) 1030 A2 Use of 365 days leads to (450 + 216 + 365 = £)1031 use of 104 of 450 + 216 + 364 or sum using 365 or 366 days (F) Trom M1 for possible A2 (summing all 3 costs) with use of 104 of 450 + 216 + 335 = £)1000 • 50 weeks leads to (450 + 216 + 355 = £)1018 • 51 weeks leads to (450 + 216 + 355 = £)1018 • 51 weeks leads to (450 + 216 + 355 = £)1023 or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts accrrectly evaluated addition, 10 or 12 lots of 2.5 to be added Either of the correct seponses implies M1 10 (inches) 12 (inches) 12 (inches) 12 (inches) 12 (inches) 7(b)(ii) 6 × 2.2 or 8 × 2.2 M1 fM1, A0, A0 also award SC1 if their 12 - 'their 10' = 2 Answer line takes precedence. An aswer needs to be selected for A marks to be awards, however if M1, A0, A0 also award SC1 if			450, 12 × 18 and 7 × 52
* 450 + 7 × n, where n = 48 to 51 miclusive • 450 + 7 × n, where n = 48 to 51 miclusive • sight of 216 and 386 or 386 or 386 (£) 1030 (£) 1040 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (£) 1050 (5) 1050 (5) 1050 10 (inches) <td>(£) 1030 A2 (£) 1030 A3 (b) 25 + 2.5 or 30 + 2.5 (b) 10 (10 + 2.5 + 10 or 2.5 + 12 M1 10 (inches) <t< td=""><td></td><td></td><td>• 12 × 18 + 7 × n, where n = 48 to 51 inclusive</td></t<></td>	(£) 1030 A2 (£) 1030 A3 (b) 25 + 2.5 or 30 + 2.5 (b) 10 (10 + 2.5 + 10 or 2.5 + 12 M1 10 (inches) <t< td=""><td></td><td></td><td>• 12 × 18 + 7 × n, where n = 48 to 51 inclusive</td></t<>			• 12 × 18 + 7 × n, where n = 48 to 51 inclusive
(£) 1030 A2 (£) 1030 A2 (£) 1030 A2 Use of 365 days leads to (450 + 216 + 365 = £)1032 A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inductive: • 48 weeks leads to (450 + 216 + 336 + 2)1002 • 49 weeks leads to (450 + 216 + 336 + 2)1023 or 49 weeks leads to (450 + 216 + 336 + 2)1023 or 51 weeks leads to (450 + 216 + 357 + 2)1023 or 51 weeks leads to (450 + 216 + 357 + 2)1023 or A1 for sight of 12.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) 12 (inches) M1 A1 A1 If M1, A0, A0 also award SC1 if their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be avarded, however if M1, A0, A0 also award SC1 if their 13.2' = 4.4 Answer line takes precedence. A1 A1	(£) 1030 A2 (£) 1030 A2 (£) 1030 A2 Use of 365 days leads to (450 + 216 + 365 = £)1031 Use of 365 days leads to (450 + 216 + 365 = £)1032 A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive: • 48 weeks leads to (450 + 216 + 335 = £)1009 • 50 weeks leads to (450 + 216 + 335 = £)1023 or • 41 or sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR 7(b)(i) 25 + 2.5 or 30 + 2.5 0R for sight of 2.5 × 10 or 0R to sight of 2.5 × 10 or 2.5 × 10 or 3.6 (pounds) M1 10 (inches) 12 (inches) M1 11 10 (inches) 12 (inches) 7(b)(i) 6 × 2.2 or 8 × 2.2 11 12 (inches) M1 12 (inches) 17.6 (pounds) 11 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 17.8 17.6 (pounds) 17.9 B1 B1 B1 B1 9(a) 1 9(b) 2			• 450 + 7 × n, where n = 48 to 51 inclusive
(£) 1030 A2 Use of 366 days leads to (450 + 216 + 365 = £)1031 Use of 366 days leads to (450 + 216 + 365 = £)1032 A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all a costs) with use of food costs for 48 to 51 weeks inclusive: • 49 weeks leads to (450 + 216 + 336 = £)1002 • 49 weeks leads to (450 + 216 + 336 = £)1002 • 50 weeks leads to (450 + 216 + 336 = £)1023 or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Stirl FT for angle the '3 amounts correctly evaluated OR 7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) M1 A1 A1 15 10 (inches) 12 (inches) M1 A1 A1 13 12 (pounds) 17.6 (pounds) A1 A1 A1 11 11 12 110° 13.2 (pounds) 17.6 (pounds) 16 11 17.6 (pounds	(£) 1030 A2 Use of 365 days leads to (450 + 216 + 365 - £)1031 Use of 366 days leads to (450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)1032 A1 for sight of 450 + 216 + 366 - £)102 A1 for sight of 450 + 216 + 366 - £)102 A 48 weeks leads to (450 + 216 + 336 - £)1002 A9 weeks leads to (450 + 216 + 336 - £)102 A 48 weeks leads to (450 + 216 + 336 - £)102 A9 weeks leads to (450 + 216 + 336 - £)102 A 49 weeks leads to (450 + 216 + 336 - £)102 A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding ther 3 amounts correctly or W1 work of 2.5 × 10 or 2.5 × 12 OR for sight of 2.5 × 10 or 2.5 × 12 M1 10 (inches) 12 (inches) 11 12 (inches) 12 M1 Allow for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) 11 H1 13.2 (pounds) 17.6 (pounds) 11 <td></td> <td></td> <td>• Sight of 216 and 364 of 365 of 366</td>			• Sight of 216 and 364 of 365 of 366
A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive: 48 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1002 49 weeks leads to (450 + 216 + 336 = £)1023 50 weeks leads to (450 + 216 + 357 = £)1023 or A1 for sight of 16 use um of 3 appropriate amounts (as given above), with products correctly evaluated S0 weeks leads to (450 + 216 + 357 = £)1023 or A1 for sight of 2.5 × 10 or 2.5 × 12 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) 12 (inches) 12 (inches) 12 (inches) 12 (inches) 13.2 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 16 H1 HM1, A0, A0 also award SC1 if 'their 13.2' = 4.4 Answer line takes precedence. 8. (x = 1 10('') (y = 115(') (z = 73(')) B1 FT 'their 115(') - 42(') correctly evaluated, i.e. check their y' - 11b('') - 42(') correctly evaluated, i.e. check their y' - 1their y' - 1t	A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive: 48 weeks leads to (450 + 216 + 336 + 21002) 49 weeks leads to (450 + 216 + 336 + 21002) 49 weeks leads to (450 + 216 + 336 + 21002) 49 weeks leads to (450 + 216 + 336 + 21002) 49 weeks leads to (450 + 216 + 336 + 21002) 49 weeks leads to (450 + 216 + 336 + 21002) 40 weeks leads to (450 + 216 + 336 + 21002) 41 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated 60 R FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluated sum in which at least 2 of the 3 amounts correctly evaluate	(£) 1030	A2	Use of 365 days leads to $(450 + 216 + 365 = \pounds)1031$ Use of 366 days leads to $(450 + 216 + 366 = \pounds)1032$
FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks leads to (450 + 216 + 336 = £)1002 • 48 weeks leads to (450 + 216 + 336 = £)1002 • 49 weeks leads to (450 + 216 + 335 = £)1016 • 51 weeks leads to (450 + 216 + 357 = £)1023 or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from M2 or M1 for A1 for their final answer from a correctly or if they only have 2 amounts are correct. Strict FT for adding their 3 amounts are correctly or with a least 2 of the 3 amounts are different or with a least 2 of the 3 amounts are correctly or if they only have 2 amounts, adding their 2 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly or or they only have 2 amounts, adding their 2 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly evaluated addition, 10 or 12 lots of 2.5 to be added T(b)(i) 25 + 2.5 or 30 + 2.5 or 30 + 2.5 M1 Allow for sight of 2.5 × 10 or 2.5 × 12 M1 10 (inches) 12 (inches) A1 H1 A1 H1 11 10 (inches) 12 (inches) 11 13.2 (pounds) 17.6 (pounds) 13.2 (pounds) 17.6 (pounds) 13.2 (pounds) 17.6 (pounds) 14 A1 15. 17.6 (pounds) <t< td=""><td>FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 64 breeks inclusive: • 48 weeks leads to (450 + 216 + 336 = £)1002 • 49 weeks leads to (450 + 216 + 335 = £)1016 • 51 weeks leads to (450 + 216 + 357 = £)1023 • 7 by (i) • 7 by (i)</td><td></td><td></td><td>A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days</td></t<>	FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 64 breeks inclusive: • 48 weeks leads to (450 + 216 + 336 = £)1002 • 49 weeks leads to (450 + 216 + 335 = £)1016 • 51 weeks leads to (450 + 216 + 357 = £)1023 • 7 by (i)			A1 for sight of 450 + 216 + 364 or sum using 365 or 366 days
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	• 48 weeks leads to (450 + 216 + 336 = £)1002 • 49 weeks leads to (450 + 216 + 337 = £)1009 • 50 weeks leads to (450 + 216 + 337 = £)1023 • 7 • 7 • 7 • 8 • 9 • 9 • 10 <t< td=""><td></td><td></td><td>FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive:</td></t<>			FT from M1 for possible A2 (summing all 3 costs) with use of food costs for 48 to 51 weeks inclusive:
 4 49 weeks leads to (450 + 216 + 343 = £)1009 50 weeks leads to (450 + 216 + 357 = £)1016 51 weeks leads to (450 + 216 + 357 = £)1023 or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts are correctly or if they only have 2 amounts, adding their 2 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly or if they only have 2 amounts, adding their 2 to the addition. 10 or 12 lots of 2.5 to be added OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) M1 A1 If M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. An answer line takes precedence. An answer line takes precedence. An answer rine takes precedence. 8. (x =) 110(⁵) (y =) 115(⁷) (z =) 73(⁷) B1 FT 'their 115(⁹) - 42(⁶) correctly evaluated, i.e. check 'their y' - 'their z' = 42 	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			• 48 weeks leads to (450 + 216 + 336 = £)1002
Image: constraint of the standard rest of the standard	$(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(x =)$ $110(^{\circ})$ $(450 + 216 + 357 = 2)1023$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $30 + 2.5$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $2.5 + 12$ or $(10)(0)(25 + 2.5 - 0r)$ $30 + 2.5$ or $2.5 + 12$ or $(10)(0)(25 + 2.5 - 10 - r)2.5 \times 12(10)(0)(1)(25 + 2.5 - 10 - r)2.5 \times 12(11)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)$			 49 weeks leads to (450 + 216 + 343 = £)1009 50 weeks leads to (450 + 216 + 350 = £)1016
or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated ORT(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches)M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M1T(b)(i) 6 × 2.2 or 8 × 2.2 T(b)(ii) 6 × 2.2 or 8 × 2.2M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 HH1M1 A0, A0 also award SC1 if their 17.5 '- 'their 13.2' = 4.4 Answer line takes precedence.8. (x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1FT 'their 115(°) '- 42(°) correctly evaluated, i.e. check 'their y - 'their 2 = 429.(a) 1B1	or A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated OR $T(b)(i)$ 25 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches)OT A1 for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M1 If M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. An answer line takes precedence. An answer line takes precedence. An answer line takes precedence.7(b)(ii) 6 × 2.2 (b)(ii) 6 × 2.2 (c) r 3 × 2.2M1 (c) awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(iii) 6 × 2.2 (c) r 3 × 2.2M1 (c) awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6 × 2.2 (c) r 3 × 2.2M1 (c) awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6 × 2.2 (c) r 3 × 2.2M1 (c) awarded, however if M1, A0, A0 also award SC1 if (their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. (x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B1 B19.(b) 2B1			 51 weeks leads to (450 + 216 + 357 = £)1023
A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluatedORFT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts are correctly or phase 2 amounts, adding their 2 amounts correctly7(b)(i) $25 \div 2.5$ or $30 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 10 (inches)M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)11If M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M113.2 (pounds)17.6 (pounds)17.6 (pounds)A1 B1 B1(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B19.(a) 1B1	A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluatedORFT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts correctly or if they only have 2 amounts, adding their 3 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly7(b)(i) $25 \div 2.5$ or OR for sight of 2.5×10 or 2.5×12 M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)11If M1, A0, A0 also award SC1 if (their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M113.2 (pounds)17.6 (pounds)17.6 (pounds)A1 B1 B1 (z =) $73(^\circ)$ 8. (x =) $110(^o)$ (y =) $115(^o)$ (2 =) $73(^\circ)$ B1 B19.(a) 19.(b) 2B1			or
ORFT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly7(b)(i) $25 \div 2.5$ or $30 \div 2.5$ M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A111 (inches)12 (inches)A112 (inches)A113.2 (pounds)17.6 (pounds)17.6 (pounds)A118.M1(x =) 110(°) (y =) 115(°)B1(x =) 73(°)B19.(a) 1B1	ORORT(b)(i) 25 + 2.5 or $30 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 10 (inches)Of 12 (inches)10 (inches)12 (inches)12 (inches)A1 A1 A113.2 (pounds)17.6 (pounds)13.2 (pounds)17.6 (pounds)14.3A1 B1 B1 B115.4110 (inches)16.5M1 Context (pounds)17.6M1 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M1 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)17.6M2 Context (pounds)			A1 for sight of the sum of 3 appropriate amounts (as given above), with products correctly evaluated
FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly 7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added 10 (inches) 12 (inches) All A1 Allow for sight of 2.5 × 10 or 2.5 to be added 10 (inches) 12 (inches) All A1 Allow for sight of 2.5 × 10 or 2.5 to be added 11 14 Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added 2.5 to be added Either of the correct responses implies M1 11 14 If M1, A0, A0 also award SC1 if 1 16 M1, A0, A0 also award SC1 if 2.5 × 10 = 25 and 2.5 × 12 = 30 7(b)(ii) 6 × 2.2 or 13.2 (pounds) 17.6 (pounds) 17.6 (pounds) A1 A1 A1 Mark answer space if completed, otherwise check diagram (x =) 110(°) B1 (y =) 115(°) B1 B1 B1 B1 B1 <td>FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts correctly or if they only have 2 amounts, adding their 3 amounts correctly7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches)M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A1 A1A1 A1A1 A111 (inches)12 (inches)12 (inches)A1 A113.2 (pounds)17.6 (pounds)13.2 (pounds)17.6 (pounds)17.6 (pounds)A1 B1 B1(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 19.(b) 2B1</td> <td></td> <td></td> <td>OR</td>	FT from M2 or M1 for A1 for their final answer from a correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts correctly or if they only have 2 amounts, adding their 3 amounts correctly7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches)M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A1 A1A1 A1A1 A111 (inches)12 (inches)12 (inches)A1 A113.2 (pounds)17.6 (pounds)13.2 (pounds)17.6 (pounds)17.6 (pounds)A1 B1 B1(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 19.(b) 2B1			OR
7(b)(i) 25 ÷ 2.5 or 30 ÷ 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 M1 Allow for sight of repeated addition, 10 or 12 lots of 2.5 × 10 or 10 (inches) 12 (inches) A1 A1 If M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. Answer line takes precedence. Answer line takes precedence. Answer line takes precedence. 7(b)(ii) 6 × 2.2 or 8 × 2.2 M1 Either of the correct responses implies M1 13.2 (pounds) 17.6 (pounds) A1 A1 If M1, A0, A0 also award SC1 if 'their 13.2' = 4.4 Answer line takes precedence. Answer line takes precedence. Answer line takes precedence. 8. K(x =) 110(°) Y= 115(°) F1 'their 115(°)' - 42(°) correctly evaluated, i.e. check 'their y' - 'their z' = 42 9.(a) 1 B1 B1 B1	Correctly evaluated sum in which at least 2 of the 3 amounts are correct. Strict FT for adding their 3 amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly7(b)(i) $25 \div 2.5$ or $30 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 10 (inches)M1 12 (inches)Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A1 14If M1, A0, A0 also award SC1 if "their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 13.2 (pounds)M1 17.6 (pounds)Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 HIf M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. (x =)110(°) (y =) 115(°) (z =)Their 115(°) B1 B1 B1 B19.(a)1B19.(b)2B1			FT from M2 or M1 for A1 for their final answer from a
amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly 7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 12 (inches) 12 (inches) 13.2 (pounds) 17(b)(ii) 6 × 2.2 or 8 × 2.2 13.2 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 18. (x =) 110(°) (y =) 115(°) (z =) 73(°) 9.(a) 1	amounts correctly or if they only have 2 amounts, adding their 2 amounts correctly 7(b)(i) 25 + 2.5 or 30 + 2.5 OR for sight of 2.5 × 10 or 2.5 × 12 10 (inches) 10 (inches) 12 (inches) 12 (inches) 13.2 (pounds) 17.6 (pounds) 17.7 (°) 181 19.(a) 1 19.(b) 2 10.(c) 10.(c) 17.6 (pounds) 17.6 (pounds) 17.6 (pounds) 181 <td></td> <td></td> <td>amounts are correct. <i>Strict FT for adding their 3</i></td>			amounts are correct. <i>Strict FT for adding their 3</i>
adding their 2 amounts correctly7(b)(i) $25 \div 2.5$ or $30 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 (inches)M1 Allow for sight of repeated addition, 10 or 12 lots of 	adding their 2 amounts correctly $7(b)(i) 25 \div 2.5$ or $30 \div 2.5$ (CR for sight of 2.5 × 10 or 2.5 × 12 10 (inches)M1Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M1 10 (inches)12 (inches)A1 A1If M1, A0, A0 also award SC1 if "their 12' - "their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 30 $7(b)(ii) 6 \times 2.2$ or 8×2.2 M1 13.2 (pounds)Either of the correct responses implies M1 13.2 (pounds)17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. (x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B1 B1M1 kanswer space if completed, otherwise check diagram9.(a) 19.(b) 2B1			amounts correctly or if they only have 2 amounts,
$7(b)(i)$ $25 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 M1 Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M1 10 (inches)12 (inches)All AllIf M1, A0, A0 also award SC1 if their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ $7(b)(ii)$ 6×2.2 ORor 8×2.2 M1Either of the correct responses implies M1 their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ $7(b)(ii)$ 6×2.2 ORor 8×2.2 M1Either of the correct responses implies M1 their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence. $8.$ $(x =)$ $(y =)$ $115(°)$ $(z =)$ $73(°)$ B1 B1 B1FT 'their 115(°)' - 42(°) correctly evaluated, i.e. check 'their y' - 'their z' = 42 $9.(a)$ 1B1	$7(b)(i)$ $25 \div 2.5$ OR for sight of 2.5×10 or 2.5×12 M1 Allow for sight of repeated addition, 10 or 12 lots of 2.5 to be added Either of the correct responses implies M1 10 (inches)12 (inches)A1 A1 A1If M1, A0, A0 also award SC1 if "their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 also award d, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ $7(b)(ii)$ 6×2.2 (pounds)or 8×2.2 M1 A1 A1Either of the correct responses implies M1 13.2 (pounds) 17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. (x =) (y =) (z =) (z =) (73(°))M1 B1 B1 B1If M1, A0, A0 also award SC1 if "their 115(°)' - 42(°) correctly evaluated, i.e. check 'their y' - 'their z' = 429.(a)1B19.(b)2B1			adding their 2 amounts correctly
OR for sight of 2.5×10 or 2.5×12 10 (inches)2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A1A1If M1, A0, A0 also award SC1 if "their 12' - 'their 10' = 2Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A18. (x =) 110(°) (y =) 115(°) (z =) 73(°)Mark answer space if completed, otherwise check diagram9.(a) 1B1	OR for sight of 2.5×10 or 2.5×12 10 (inches) 2.5 to be added Either of the correct responses implies M110 (inches)12 (inches)A1 A1A1 A1If M1, A0, A0 also award SC1 if "their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1 13.2 (pounds)Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 B19.(a) 19.(b) 2B1	7(b)(i) 25 ÷ 2.5 or 30 ÷ 2.5	M1	Allow for sight of repeated addition, 10 or 12 lots of
10 (inches)12 (inches)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer line takes precedence.(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 1B1	10 (inches)12 (inches)A1 A1 A1A1 A1 A1If M1, A0, A0 also award SC1 if "their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 1B19.(b) 2B1	OR for sight of 2.5×10 or 2.5×12		2.5 to be added Fither of the correct responses implies M1
12 (inches)A1If M1, A0, A0 also award SC1 if 'their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be 	12 (inches)A1If M1, A0, A0 also award SC1 if 'their 12' - 'their 10' = 2 Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 1B19.(b) 2B1	10 (inches)	A1	
Their 12' - 'their 10' = 2Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram9.(a) 1B19.(a) 1B1	Their 12' - their 10' = 2Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B19.(a) 1B19.(b) 2B1	12 (inches)	A1	If M1, A0, A0 also award SC1 if
Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(z =) 110(°) (z =) 73(°)B1 B19.(a) 1B1	Answer line takes precedence. An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 × 10 = 25 and 2.5 × 12 = 307(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(z =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B19.(a) 1B19.(b) 2B1			'their $12'$ - 'their $10' = 2$
An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 \times 10 = 25 and 2.5 \times 12 = 307(b)(ii) 6 \times 2.2or8 \times 2.2M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1 B19.(a) 1B1	An answer needs to be selected for A marks to be awarded, however if M1, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 1B19.(b) 2B1			Answer line takes precedence.
Awarded, however if N11, A0, A0 awarded, also award SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$ 7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1 A1If M1, A0, A0 also award SC1 if "their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B19.(a) 1B1	Awarded, however if M1, A0, A0 awarded, also award SC1 for sight of 2.5 \times 10 = 25 and 2.5 \times 12 = 307(b)(ii) 6 \times 2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Mark answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B19.(a) 1B19.(b) 2B1			An answer needs to be selected for A marks to be
$7(b)(ii) 6 \times 2.2$ or 8×2.2 M1Either of the correct responses implies M1 $13.2 (pounds)$ $17.6 (pounds)$ A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 $8.$ Answer line takes precedence. $8.$ Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ B1 $(y =) 115(^{\circ})$ B1 $(z =) 73(^{\circ})$ B1 $9.(a) 1$ B1	7(b)(ii) 6×2.2 or 8×2.2 M1Either of the correct responses implies M113.2 (pounds)17.6 (pounds)A1A2A1 <t< td=""><td></td><td></td><td>SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$</td></t<>			SC1 for sight of $2.5 \times 10 = 25$ and $2.5 \times 12 = 30$
$7(b)(ii)$ 6 × 2.2or8 × 2.2M1Either of the correct responses implies M1 $13.2 (pounds)$ $17.6 (pounds)$ A1A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 $8.$ Answer line takes precedence. $8.$ Mark answer space if completed, otherwise check diagram $(x =)$ $110(^{\circ})$ B1 $(z =)$ $73(^{\circ})$ $9.(a)$ 1 $9.(a)$ 1	$7(b)(ii)$ 6 × 2.2or 8×2.2 M1Either of the correct responses implies M1 $13.2 (pounds)$ $17.6 (pounds)$ A1A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 $8.$ Answer line takes precedence. $8.$ Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 $9.(a)$ 1B1 $9.(b)$ 2B1			
13.2 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ Mark answer space if completed, otherwise check diagram9.(a) 1B19.(a) 1B1	13.2 (pounds)17.6 (pounds)A1 A1 A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8. $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ Mark answer space if completed, otherwise check diagram9.(a) 1B1 B19.(b) 2B1	$7(b)(ii) 6 \times 2.2$ or 8×2.2	M1	Either of the correct responses implies M1
17.6 (pounds)A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.48.Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ B1 B1 B1 $(z =) 73(^{\circ})$ B1 B19.(a) 1B1	17.6 (pounds)A1If M1, A0, A0 also award SC1 if 'their 17.6' - 'their 13.2' = 4.4 Answer line takes precedence.8.Answer line takes precedence.8.Mark answer space if completed, otherwise check diagram(x =) 110(°) (y =) 115(°) (z =) 73(°)B1 B1B1 B1FT 'their 115(°)' - 42(°) correctly evaluated, i.e. check 'their y' - 'their z' = 429.(a) 1B19.(b) 2B1	13.2 (pounds)	A1	
8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 B1 B1 FT 'their $115(^{\circ})' - 42(^{\circ})$ correctly evaluated, i.e. check 'their y' - 'their z' = 429.(a) 1B1	$x = 110(^{\circ})$ $x = 100000000000000000000000000000000000$	17.6 (pounds)	A1	If M1, A0, A0 also award SC1 if (their 17.6' - 'their 13.2' = 4.4
8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 	8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 B1 B1Mark answer space if completed, otherwise check diagram9.(a) 11B1 B1FT 'their 115(^{\circ})' - 42(^{\circ}) correctly evaluated, i.e. check 'their y' - 'their z' = 429.(b) 2B1			
8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 B1 B1B1 B1 B19.(a) 1B1	8.Mark answer space if completed, otherwise check diagram $(x =) 110(^{\circ})$ $(y =) 115(^{\circ})$ $(z =) 73(^{\circ})$ B1 B1B1 B1B1 B19.(a) 1B19.(b) 2B1			Answer line takes precedence.
$(x =)$ $110(^{\circ})$ $B1$ $B1$ $(y =)$ $115(^{\circ})$ $B1$ $B1$ $(z =)$ $73(^{\circ})$ $B1$ $B1$ $9.(a)$ 1 $B1$ $B1$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8.		Mark answer space if completed, otherwise check diagram
$ \begin{array}{ccc} (y =) & 115(\degree) \\ (z =) & 73(\degree) \end{array} & \begin{array}{c} B1 \\ B1 \\ 9.(a) & 1 \end{array} & \begin{array}{c} FT & (their \ 115(\degree)' - 42(\degree) \ correctly \ evaluated, \ i.e. \ check \\ (their \ y' - (their \ z' = 42) \end{array} \\ \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(x =) 110(°)	B1	-
9.(a) 1 B1 B1	9.(a) 1 9.(b) 2 B1	(y =) 115(°) (z =) 73(°)	B1 R1	ET 'their $115(^\circ)' = 42(^\circ)$ correctly evaluated i.e. check
9.(a) 1 B1	9.(a) 1 B1 9.(b) 2 B1			their y' - their $z' = 42$
S.(a) I	9.(a) 1 B1 9.(b) 2 B1		D4	
	9.(b) 2 B1	9.(a) 1	BJ	
9.(b) 2 B1		9.(b) 2	B1	

	-	
10(a) (Cost of flags 4 × 40 =) 160(p) (Cost of muffin cases) (12 × 4 ÷ 16) × 22 or 3 × 22	B1	Shown in pence, accept in £. However, if units are incorrect penalise – 1 once only, unless corrected in further work <i>Mark final answers at each stage (then possible FT)</i> <u>Accept use of 'their derived number of flags' as 'their</u> <u>48 (4×12) flags' FT their consistent number of flags</u> <u>for all marks, then penalise -1</u> <u>if 'their derived number</u> <u>of flags' \neq 48</u>
(=) 66 (p)	A1	
(Cost of ingredients) (12 × 4 ÷ 6) × 25 or 8 × 25 (=) 200 (p)	M1 A1	 If previous M0, M0 award SC1 here for sight of any one of the following: (number of packs of muffin cases) 12×4÷16 and (number of multiples of ingredients) 12×4÷6 (number of packs of muffin cases =) 3 (number of multiples of ingredients =) 8
(Money taken in selling $12 \times 4 \times 30 =$) 1440(p)	B1	
(Profit) 1440 – 160 – 66 – 200 (= 1440 – 4.26)	M1	 FT the following: 'their 160', provided from an attempt at 4×40, 'their 1440', provided from an attempt at 12×4×30, 'their 66' and 'their 200' provided at least 1 M1 mark has previously been awarded
1014(p) or (£)10.14	A1	If units are given they must be correct
10(b) <u>400 – 80</u> (× 100) or equivalent	M1	
80 400 (%)	A1	
11(a) Unambiguously stating or implying 'No' with a reason, e.g. 'all scattered' 'no relationship',	E1	If a satisfactory reason is given ignore any further spurious comments Allow, e.g. 'no pattern', 'no trend', 'no steady plotted points', 'you can't draw a line of best fit', 'no steady line', 'they are not in a line', 'random points', 'points all over the place', 'plots are everywhere', 'no link' Do not accept, e.g. 'no correlation' 'there were lots of birds in the garden when the wind speed was low and high', 'too many outliers', 'spread far apart'
11(b) 7 (birds)	B1	