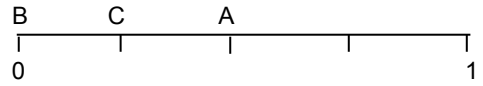
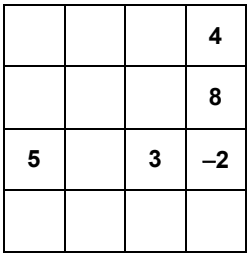
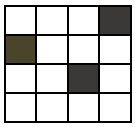
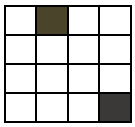
UNIT 2: CALCULATOR-ALLOWED, FOUNDATION TIER

GCSE Mathematics Unit 2: Foundation Tier	Marks	Comments
1. (Profit =) 84 × (£)5 – (£)120 = (£)300	M1 A1 2	For correct substitution.
2. (a) Diameter (b) Tangent (c) Trapezium	B1 B1 B1 3	
3. (a)  (b) $\frac{7}{8}$	 B3 B1 4	Accept names e.g. Wales (A), France (B), England (C) B1 for each. Accept C roughly between 1/8 and 3/8.
4.  	B3 3	For all five correct entries. B2 for three or four correct entries. B1 for two correct entries
5. (a) (i)  (ii)  (b) 2	B1 B1 B1 3	Only these three squares to be shaded. Only these two squares to be shaded. SC1 if reflections in <u>both</u> cases are correct but extra squares have been shaded.

GCSE Mathematics Unit 2: Foundation Tier	Marks	Comments
6.(a) Correct three-digit number shown. (i.e. sum of digits = 9) Correct answer for their three-digit number ÷ 9	B1 B1	The numbers should have the digits 1, 3, 5 or 2, 3, 4. F.T. their three-digit number correct to the nearest whole number or 1 or more decimal places. e.g. sight of 412 ÷ 9 = 45·7 or 45·8 or 46 gains B0B1. SC1 for a correct evaluation if a three-digit multiple of 9 is used with a repeated digit. e.g. 441 ÷ 9 = 49 gains SC1.
(b) Dylan is 18 Lois is 6	B2 4	B1 for 'their Dylan' = 'their Lois' + 12. B1 for 'their Dylan' = 3 × 'their Lois'.
7.(a) (i) $(x=)$ 3 (ii) $(x=)$ 4	B1 B1	
(b) 6 – 4 + 5 = 7	M1 A1	Sight of 6, 4 and 5. C.A.O.
(c) (£)$8n$	B1 5	
8.(a) $(a=)$ 180 – 90 – 38 or equivalent. = $52^{(o)}$	M1 A1	
(b) $(b=)$ 360 – 101 – 154 or equivalent. = $105^{(o)}$	M1 A1 4	
9. $\frac{10}{0{\cdot}68}$ or equivalent. 14 (key rings) (Change =) (£)10 – 14 × (£)0·68 or equivalent = £0.48 or 48p Organisation and communication Accuracy of writing	M1 A1 M1 A1 OC1 W1 6	Allow M1 for repeated addition if aiming for £10 C.A.O. 14·7..... implies M1A0 F.T. 'their whole number of key-rings' Units must be given. Allow £0.48p
10. 360 – (46 + 117 + 34) = $163^{(°)}$ $(x=)$ $17^{(°)}$	M1 A1 B1 3	 F.T. 180 – 'their 163'.
11.(a) –9 (b) 12 (c) $3(n-7)$	B1 B1 B1 3	
12. (Original mean =) 13 (New total =) 5 × 14 = 70 New number = 18	B1 M1 A1 B1 4	 F.T. 5 × 'their 13 + 1'. F.T. 'their <u>derived</u> new total' – 'their original total'.
13. 4 × 4 × 4 64 (cm³) 64 / (8×4) or $32h=64$ 2(cm)	M1 A1 M1 A1 4	*Alternative method:* *4 × 4 M1* *16 (cm²) A1* *16/8 M1* *2 (cm) A1*

GCSE Mathematics Unit 2: Foundation Tier	Marks	Comments
14. More girls in class B than in class A. Equal number of girls and boys in class B. Ratio of Girls : Boys = 3 : 1 in class A.	B1 B1 B1 3	
15. $x + 2x + 3x = 180$ $x = 30$ Three angles are 30(˚), 60(˚), 90(˚)	M1 A1 A1 3	*SC1 for the answers of 30*(˚), *60*(˚) *and 90*(˚) *without forming an equation* *SC1 for the answers of 60*(˚), *120*(˚) *and 180*(˚) *from equating to 360*
16.(a) All 13 numbers placed correctly and no extra. (b) $\frac{4}{13}$	B4 B2 6	B3 for 10,11 or 12 correct OR all correct but omission of numbers outside A∪B. B2 for 8 or 9 correct. B1 for 6 or 7 correct. *Any duplicates are marked as incorrect.* F.T. 'their diagram'. B1 for a numerator of 4 OR a denominator of 13 in a fraction less than 1.
17. 4·38	B2 2	B1 for 4·37(7.....)
18. Clockwise rotation of 90° about the origin.	B3 3	For all four components. B2 for any three, B1 for any two. (Penalise '¼ turn' –1 only.)