MATHEMATICS 2nd SAMs 2017 Unit 2 (Calculator allowed) Foundation Tier	Mark	MARK SCHEME Comments (Page 1)
1. (£)12.25 (£) 2.49 9 (cartons) (£) 34.03	B1 B1 B1 B1 4	
2. *AC* = 6·5 cm *BC* = 8 cm Completed triangle	 M1 M1 A1 3	Allow ± 2 mm Dependent on at least one M1
3. Evidence of counting squares 46 – 52 (cm^2)	M1 A1 2	Inside the shape
4. (a) (i) likely (ii) unlikely (b) 4	B1 B1 B1 3	
5. (a) 42 **14** 28 6 **8** **20** 1 **5** 3 **17** (b) £1, 50p, 20p, 10p, 5p (c) (Weight of potatoes for 1 type of meal =) 2205 ÷ 9 (Weight of potatoes for 4 types of meal = 245) × 4 980 (kg) Organisation and communication	B3 B1 M1 M1 A1 OC1 8	B3 for 5 correct answers B2 for 3 or 4 correct entries on FT B1 for 2 correct entries on FT OR 2205 × 4 (= 8820) (8820) ÷ 9 CAO
6. (a) (x =) 18 (b) (x =) 60	B1 B1 2	Accept embedded answers
7. ($T\hat{A}B$ =) 64° (*AT* =) 7 cm	B1 B1 2	± 2° ± 2 mm
8. (a) FALSE TRUE TRUE TRUE (b) Shape with rotational symmetry of order 3 Same shape showing 3 correct lines of symmetry	B2 B1 B1 4	B1 for 3 correct

MATHEMATICS 2nd SAMs 2017 Unit 2 (Calculator allowed) Foundation Tier	Mark	MARK SCHEME Comments (Page 2)
9. (a) 5, **8**, **11**, 14 Add 3 to the previous number OR 5, **7·05**, **9·93**, 14, Multiply previous term by $\sqrt[3]{14/5}$ = 1·67… (b) 40, **20**, **10**, 5 Divide previous term by 2 OR 40**,** $\mathbf{28\frac{1}{3}}$**,** $\mathbf{16\frac{2}{3}}$**,** 5 Subtract $11\frac{2}{3}$ from the previous term	 B2 (B1) (B1) B1 B1 (B1) (B1) 4	For both (a) and (b), B2 for both spaces filled AND rule given. B1 for either filling the spaces or giving a rule (from those on the left). For both entries For both entries
10. (a) $7g - 2f$ (b) 10 (c) 0 and –1	B2 B2 B2 6	Must be in an expression for B2. B1 for sight of $7g$ or $-2f$. B1 for –6 + 16. B1 for 0.
11. (a) (i) $\frac{1}{80}$ (ii) $\frac{1}{2}$ (b) 7 red 4 green 1 black	B1 B1 B1 3	
12. 0·38 × 15·6 or equivalent = 5·928 (ISW)	M1 A1 2	Unsupported 5·9 or 5·92 or 5·93 is M1A0.
13. Unambiguous sketch (i.e. rectangles identified) OR Unambiguous description of possible layout. Correct use of 'Area = length × width' (Uncovered area =) 9 × 9 – 8 × 4 – 7 × 2 35(cm^2)	E1 B1 M1 A1 4	Allow E1 if intent clear. On any one of the three given shapes.
14. (6 × 0) + 5 × 1 + 11 × 3 ÷ 22 1·73 Accuracy of writing	M1 m1 A2 W1 5	For attempt at $\sum fx$ or sight of 38. A1 for 1·72(……)

MATHEMATICS 2nd SAMs 2017 Unit 2 (Calculator allowed) Foundation Tier	Mark	MARK SCHEME Comments (Page 3)
15. A (11, −1) B (21, 9) C (21, 1)	B2 B2 B2 6	B1 for each ordinate. B1 for each ordinate. B1 for each ordinate. FT 'their 21'. Accept answers on the diagram.
16. Use of 'Speed = Distance ÷ Time' (Average speed =) $\frac{80}{2{\cdot}5}$ = 32(mph)	M1 m1 A1 3	Allow M1 for 80 / 2(hr) 30(min) or 80 / 2·3 CAO
17.(a) Correct rotation (b) Correct enlargement with scale factor 2	B2 B2 4	B1 for clockwise rotation. B1 for correctly sized rectangle in incorrect position OR consistent use of wrong scale factor OR 2 correct vertices