



GCSE MARKING SCHEME

AUTUMN 2020

**GCSE
MATHEMATICS – UNIT 2 (FOUNDATION TIER)
3300U20-1**

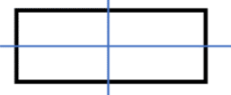
INTRODUCTION

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
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GCSE MATHEMATICS Unit 2: Foundation Tier	Mark	Comments
1. 1.98 53 5.88 0.41	B1 B1 B1 B1	Ignore spurious units
2.(a) 3 700 000	B1	
2.(b) 9998	B1	
2.(c) 1, 3, 5 and 15	B2	Ignore repeats. Allow 1×15 and 3×5 . B1 for 2 correct factors with none incorrect, OR for 3 or 4 correct with no more than one incorrect.
3.(a) unlikely	B1	
3.(b) 20	B1	
3.(c) Rolling a 1 on the dice	B1	
4.(a) 	B2	B1 for two correct lines with one incorrect line OR for one correct line with no incorrect lines.
4.(b) (an) equilateral (triangle)	B1	
5.(a) 102 OR 120	B1	
5.(b) 201 OR 210	B1	
6. Three different even numbers with a sum of 24, not including 8. Possible solutions are 2, 4 (and) 18 2, 6 (and) 16 2, 10 (and) 12 4, 6 (and) 14	B3	In any order. Allow inclusion of negative numbers. If B3 not awarded, award B2 for three numbers which sum to 24 which satisfy two of the three conditions: <ul style="list-style-type: none"> • The numbers are different • The numbers are even • None of the numbers is 8 If B2 not awarded, award B1 for three numbers which sum to 24.
7.(a) 0.12 or $\frac{3}{25}$ or equivalent	B1	
7.(b) $\frac{3}{5} \times 632$ or equivalent $= 379.2$	M1 A1	Award M1 A0 for $1896/5$ or $379\frac{1}{5}$.
7.(c) 2.5	B1	
8. $\frac{3}{10}$ 30 $\frac{9}{20}$ 0.45	B1 B1 B1 B1	Accept 30/100 for 3/10

<p>13.(a)</p>	<p>B2</p>	<p>B1 for each individual shape. Ignore clearly deleted shading.</p>
<p>13.(b) Reflection (in the line) $x = 5$</p>	<p>B2</p>	<p>B1 for stating 'Reflection'. Ignore extra wording once 'reflection' (or 'reflected') seen. B1 for stating $x = 5$ (simply drawing the line is B0)</p>
<p>14.(a) $10x + 15 = 20$ OR $2x + 3 = 4$ $10x = 5$ OR $2x = 1$ $x = \frac{5}{10}$ OR $x = \frac{1}{2}$ or equivalent</p>	<p>B1 B1 B1</p>	<p>FT until 2nd error. Mark final answer. Allow an embedded answer but penalise -1 if contradicted by $x \neq \frac{1}{2}$ or 0.5.</p>
<p>14.(b) $5(n - 3)$ or $5 \times (n - 3)$ or $(n - 3)5$ or $(n - 3) \times 5$ or $5n - 15$</p>	<p>B2</p>	<p>B1 for sight of $n - 3 \times 5$ OR sight of $5 \times n - 3$. B0 for unsupported $n - 15$ OR unsupported $5n - 3$. Allow 'n = 5(n - 3)' etc Mark final answer.</p>
<p>15.(a) YES AND a valid explanation. e.g. 'the other two angles would be (both) 20°' e.g. diagram showing (isosceles) triangle with angles of 140°, 20° and 20°.</p>	<p>E1</p>	<p>A valid explanation implies YES circled if not otherwise contradicted (by circling NO). Explanations must engage with the specific triangle given (with an angle of 140°) and not isosceles triangles in general.</p>
<p>15.(b) $a + b = 150$</p>	<p>B1</p>	
<p>16. $[n(G \cap S) =] \quad 10$ $[n(S) =] \quad 13$</p>	<p>B1 B1</p>	<p>Entries must be a whole numbers. $[n(\mathcal{E})]$ must be 30 (i.e. no additional 'non-Spanish'). Any blank space to be taken as 0.</p>
<p>17. (Length of AD or BC =) 10 (cm) (Area of ABCD = $5 \times 10 =$) 50 (cm²) (Area APB =) $\frac{\pi \times 5^2}{4}$ = 19.6(.....)(cm²) (Shaded area = $50 - 19.6 =$) 30.3(...) or 30.4(cm²)</p>	<p>B1 B1 M1 A1 B1</p>	<p>May be seen on the diagram or implied in later work. FT $5 \times$ 'their AD (or BC)'. The 50(cm²) may be shown as two areas of 25(cm²) for B1 B1. SC1 for sight of $\pi \times 5^2$ or equivalent (78.5....) FT 'their stated area ABCD' – 'their stated <u>area</u> APB' <i>Note: Sight of $(25 - \text{'area of APB'}) + 25$ implies the first two B marks. [rectangle divided in half]</i></p>