

REVISE

.wales

1.04 – Bills, budgeting & bank statements

Mark schemes for the 1.04 question pack

Spec 1.8.5 – Unit 1

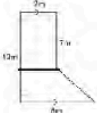
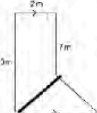
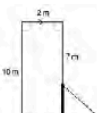

SOLUTIONS · 2025 SPECIFICATION

Mark schemes for the 4 questions in the corresponding revise.wales question pack (14 marks total). Sources: legacy WJEC GCSE papers, WJEC SAM, and custom-authored mark schemes. Pack layout © revise.wales.

4(a) 21p	B1	
<p>4(b)</p> <p>Number of units of electricity (14400 – 13900 =) 500 (units)</p> <p>(Charge for electricity =) $500 \times 21p$</p> <p style="text-align: right;">(£)105</p>	<p>B1</p> <p>M1</p> <p>A1</p>	<p><u>Throughout: if units are given they must be correct, or a consistent FT from 5 charges in (a)</u></p> <p>FT 'their 14400 – 13900', or 14400 – 13450 (= 950) Allow M1 (but A0) for any of, e.g.</p> <ul style="list-style-type: none"> • $(14400 \times 21p =) (\pounds)3024$ • $(13900 \times 21p =) (\pounds)2919$ • $(13450 \times 21p =) (\pounds)2824.5(0)$ • $(450 \times 21p =) (\pounds)94.5(0)$ <p>or equivalent answers in pence (These do not involve a subtraction of units)</p> <p>Accept 10500p or £105.00p FT provided subtraction of units has been attempted calculation examples:</p> <ul style="list-style-type: none"> • $21p \times 950 = (\pounds)199.5(0)$ • $20.5p \times 500 = (\pounds)102.5(0)$ • $21.5p \times 500 = (\pounds)107.5(0)$ • $22p \times 500 = (\pounds)110$ • $22.5p \times 500 = (\pounds)112.5(0)$
<p>Standing charge for August, September and October (£)23.4(0)</p>	B1	CAO
<p>Total charges (105 + 23.40 =) (£)128.4(0)</p>	B1	<p>FT 'their charge for electricity' + 'their standing charge', provided these amounts are from:</p> <ul style="list-style-type: none"> • M1 previously awarded, and • 'their standing charge' > £22.80 but ≤£24 <p>FT 500 units examples: (20.5p) £23.40 + 102.50 = £125.90 (21.5p) £23.40 + 107.50 = £130.90 (22p) £23.40 + 110.00 = £133.40 (22.5p) £23.40 + 112.50 = £135.90</p>
<p>5% VAT (£)6.42</p>	B1	<p>FT provided at least M1 and B1 previously awarded (Possible VAT FT 500 units with <u>consistent</u> use of: 20.5p leads to £6.29, £6.295, £6.30 21.5p leads to £6.54, £6.55, £6.545 22p leads to £6.67 22.5p leads to £6.79, £6.795, or £6.80</p>
<p style="text-align: right;">Total bill (£)134.82</p>	B1	CAO
<p>See next page.</p>		

<p>3(a) (Number of units is) 800</p> <p>(Electricity cost is) 800×0.23 or 800×23 (£)184 or 18400(p)</p> <p>(Standing charge + electricity) (£) 208 or 20800(p)</p> <p>(Total bill including VAT at 5%) 1.05×208 or 1.05×20800 or equivalent (£)218.4(0) or 21840(p)</p> <p>(Budget per month $\text{£}218.40 \div 3 =$) (£)72.8(0) or 7280(p)</p>	<p>B1</p> <p>M1</p> <p>A1</p> <p>B1</p> <p>M1</p> <p>A1</p> <p>B1</p>	<p>FT 'their 20950 – 20150', must be from attempting this subtraction</p> <p>If units are given they must be correct Accept £184.00p, do not accept £184p</p> <p>FT 24 + 'their 184' provided units are consistent May be in implied or embedded in further work, e.g. if $184 \times 1.05 + 24$ seen and calculated correctly to (£)217.2(0)</p> <p>FT 'their (£)208' or 'their 20800(p)', including if the standing charge is omitted (i.e. (£)184 used) Allow if standing charge is added after adding VAT to the electricity cost</p> <p>CAO</p> <p>FT 'their total bill' $\div 3$ provided at least 2 marks previously awarded Allow rounded up to the nearest £ On FT allow rounding to 10p, or rounding up to the nearest £</p> <p>(Note: FT answers from</p> <ul style="list-style-type: none"> one month standing charge $(\text{£})201.6(0) \div 3 = (\text{£})67.2(0)$ standing charge omitted $(\text{£})193.2(0) \div 3 = (\text{£})64.4(0)$
<p>3(a) <i>Alternative method:</i></p> <p>(Number of units is) 800</p> <p>(Electricity cost is) 800×0.23 or 800×23 (£)184 or 18400(p)</p> <p>(Budget before VAT $184 \div 3 + 24 \div 3 =$) (£) 69.33(3..)</p> <p>(Total bill including VAT at 5%) $1.05 \times (184 \div 3 + 24 \div 3)$ or equivalent</p> <p>(Budget per month) (£)72.8(0) or 7280(p)</p>	<p>B1</p> <p>M1</p> <p>A1</p> <p>B1</p> <p>M2</p> <p>A1</p>	<p><i>Watch for stages in other orders, check for embedded equivalent stages</i></p> <p>FT 'their 20950 – 20150', must be from attempting this subtraction</p> <p>If units are given they must be correct Accept £184.00p, do not accept £184p</p> <p>FT 'their 184' + 8 provided units are consistent May be implied or embedded in further work, e.g. if $(184 \div 3) \times 1.05 + 8$ seen and calculated correctly to (£)72.4(0)</p> <p>FT 'their $184 \div 3 + 24 \div 3$' M1 for either of the following:</p> <ul style="list-style-type: none"> $1.05 \times$ 'their $184 \div 3$' (no standing charge included) $1.05 \times$ 'their $184 \div 3 + 8$' (no VAT on standing charge) <p>FT from M2 or M1 Allow rounded up to the nearest £ On FT allow rounding to 10p, or rounding up to the nearest £</p>

<p>Organisation and communication</p> <p>Writing</p>	<p>OC1</p> <p>W1</p>	<p>For OC1, candidates will be expected to:</p> <ul style="list-style-type: none"> • 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 <p>For W1, candidates will be expected to:</p> <ul style="list-style-type: none"> • 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.
<p>3(b) $500 \times 1.022^5 \times 1.016^{15}$ $(500 \times 1.022^5 = 557.473\dots)$ $(500 \times 1.016^{15} = 634.418\dots \text{ or } 634.42)$</p> <p>(£) 707.34</p>	<p>M3</p> <p>M2</p> <p>OR</p> <p>M1</p> <p>A1</p>	<p>OR equivalent method to increase by 2.2% and to increase by 1.6% on different amounts for appropriate number of years</p> <p>M2 for sight of either $\times 1.022^5$ or $\times 1.016^{15}$ or equivalent calculations</p> <p>OR</p> <p>M1 for sight of either $\times 1.022$ or $\times 1.016$ or equivalent calculations</p> <p>A1 Mark final answer, CAO, accepting answers in the range (£) 707.33 to (£) 707.35</p> <p>(Note: Sight of (£)511 or (£)555 implies 500×1.022, from working with 2.2% of £500, M1 is awarded)</p>

Unit 1: Higher Tier	Mark	Comments																																				
<p>2(a) (Total area of the driveway)</p>  <ul style="list-style-type: none"> • $\frac{1}{2} \times (10 - 7) \times (2 + 6) + 2 \times 7$ • $\frac{1}{2} \times 3 \times 8 + 2 \times 7$ (= 12 + 14)  <ul style="list-style-type: none"> • $\frac{1}{2} \times 2 \times (7 + 10) + \frac{1}{2} \times 6 \times (10 - 7)$ • $\frac{1}{2} \times 2 \times 17 + \frac{1}{2} \times 6 \times 3$ (= 17 + 9)  <ul style="list-style-type: none"> • $\frac{1}{2} \times (10 - 7) \times (6 - 2) + 2 \times 7 + 2 \times 3$ • $\frac{1}{2} \times 3 \times 4 + 2 \times 10$ (= 6 + 20)  <ul style="list-style-type: none"> • $6 \times 10 - \frac{1}{2} \times (6 - 2) \times (7 + 10)$ • $6 \times 10 - \frac{1}{2} \times 4 \times 17$ (= 60 - 34) 	<p>M2</p>	<p>M1 for one of the following appropriate areas:</p> <ul style="list-style-type: none"> • $\frac{1}{2} \times (10 - 7) \times (2 + 6)$ (= 12m² area of trapezium) • $\frac{1}{2} \times 2 \times (7 + 10)$ (= 17m² area of trapezium) • $\frac{1}{2} \times 6 \times (10 - 7)$ (= 9m² area of a triangle) • $\frac{1}{2} \times (10 - 7) \times (6 - 2)$ (= 6m² area of the triangle) • $\frac{1}{2} \times (6 - 2) \times (7 + 10)$ (= 34m² area 'extra' trapezium) 																																				
<p style="text-align: right;">26 (m²)</p>	<p>A1</p>	<p>CAO</p>																																				
<p>Cost in the inclusive range (£)1780 to (£)1860</p>	<p>B1</p>	<p>FT '20 ≤ their derived composite area ≤ 30' for a suitable cost from the scatter diagram, within a range (shown below); must be for a composite area</p> <p>Do not FT from the perimeter or with the missing side, 25(m)</p> <p>Allow an answer in a range, provided 'their range of answers' is inclusively within the stated range</p> <p>On FT cost in the inclusive range:</p> <table border="1" data-bbox="853 1198 1396 1534"> <thead> <tr> <th>Area (m²)</th> <th>Least estimated cost (£)</th> <th>Greatest estimated cost (£)</th> </tr> </thead> <tbody> <tr><td>20</td><td>1410</td><td>1460</td></tr> <tr><td>21</td><td>1460</td><td>1510</td></tr> <tr><td>22</td><td>1520</td><td>1570</td></tr> <tr><td>23</td><td>1590</td><td>1650</td></tr> <tr><td>24</td><td>1650</td><td>1710</td></tr> <tr><td>25</td><td>1700</td><td>1780</td></tr> <tr><td>26</td><td>1780</td><td>1860</td></tr> <tr><td>27</td><td>1850</td><td>1930</td></tr> <tr><td>28</td><td>1920</td><td>2010</td></tr> <tr><td>29</td><td>1970</td><td>2060</td></tr> <tr><td>30</td><td>2030</td><td>2130</td></tr> </tbody> </table>	Area (m ²)	Least estimated cost (£)	Greatest estimated cost (£)	20	1410	1460	21	1460	1510	22	1520	1570	23	1590	1650	24	1650	1710	25	1700	1780	26	1780	1860	27	1850	1930	28	1920	2010	29	1970	2060	30	2030	2130
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Unit 2: Higher Tier	Mark	Comments
1(a) $(2.31 \div 7) \div 0.30$ or $(2.31 \div 0.30) \div 7$ or $(231 \div 7) \div 30$ or $(231 \div 30) \div 7$ or equivalent 1.1 (kWh)	M2 A1	Allow if brackets are implied in further working May be shown in stages M1 for any of the following: <ul style="list-style-type: none"> • $2.31 \div 0.30$ (= 7.7) • $2.31 \div 7$ (= 0.33) • $(231 \div 7) \div 30$ (= 110) • $(2.31 \div 7) \div 30$ (= 0.011) • $(231 \div 0.30) \div 7$ (= 110) • $(2.31 \div 30) \div 7$ (= 0.011) CAO. Ignore incorrect units
1(b) (Height freezer door) $2 \times 1800 \div 5$ or $\frac{2}{5} \times 1800$ or 0.4×1800 or equivalent 720 (mm) ((Diagonal of freezer door) ² =) $600^2 + 720^2$ Diagonal ² = 878 400 or (Diagonal =) $\sqrt{878\,400}$ (Diagonal =) 937(.22... mm)	M1 A1 M1 A1 A1	Or alternative full method FT 'their height of freezer door' including 1080 or 1800 Accept working in m or cm for possible M1, A1 Final answer must be given in mm FT from M1 for the correctly evaluated square root of 'their 878 400' provided 'their answer' > 'their 720' for possible A1 If final M0 A0 A0 awarded as a different length, not 'their 720', is used to calculate the diagonal, award SC1 for a correct statement of Pythagoras' Theorem, and SC1 for a correct evaluation of 'their diagonal'