Structure of the marking scheme

Candidate responses are marked according to different scales, depending on the types of response anticipated. Scales labelled A divide candidate responses into two categories (correct and incorrect), scales labelled B divide responses into three categories (correct, partially correct, and incorrect), and so on. The scales and the marks that they generate are summarised in this table:

Scale label	**A**	**B**	**C**	**D**
No. of categories	2	3	4	5
5-mark scale	0, 5	0, 2, 5	0, 2, 3, 5	0, 2, 3, 4, 5
10-mark scale		0, 5, 10	0, 3, 7, 10	0, 3, 5, 8, 10
15-mark scale			0, 5, 10, 15	0, 5, 9, 12, 15

A general descriptor of each point on each scale is given below. More specific directions in relation to interpreting the scales in the context of each question are given in the scheme, where necessary.

Marking scales – level descriptors

A-scales (two categories)

- incorrect response (no credit)
- correct response (full credit)

B-scales (three categories)

- response of no substantial merit (no credit)
- partially correct response (partial credit)
- correct response (full credit)

C-scales (four categories)

- response of no substantial merit (no credit)
- response with some merit (low partial credit)
- almost correct response (high partial credit)
- correct response (full credit)

D-scales (five categories)

- response of no substantial merit (no credit)
- response with some merit (low partial credit)
- response about half-right (mid partial credit)
- almost correct response (high partial credit)
- correct response (full credit)

In certain cases, typically involving incorrect rounding, omission of units, a misreading that does not oversimplify the work, or an arithmetical error that does not oversimplify the work, a mark that is one mark below the full-credit mark may be awarded. This level of credit is referred to as *Full Credit –1*, and these types of errors are identified with an asterisk (*). Thus, for example, in Scale 10C, *Full Credit –1* of 9 marks may be awarded.
No marks may be awarded other than those on the appropriate scale, and *Full Credit –1*.

Summary of mark allocations and scales to be applied

Question 1 (20)

(a)	5A
(b)	5B
(c)	5C
(d)	5C

Question 2 (30)

(a)	5B
(b)	5C
(c)	5B
(d)	5B
(e)	5C
(f)	5C

Question 3 (15)

(a)	5B
(b)	10D

Question 4 (20)

(a)	5C
(b)	5D
(c)	5D
(d)	5D

Question 5 (30)

(a)	5D
(b)(i)	5B
(b)(ii)	5B
(b)(iii)	5B
(b)(iv)	5B
(b)(v)	5A

Question 6 (10)

	10C

Question 7 (30)

(a)(i)(ii)	10D
(b) (i)(ii)	10D
(b)(iii)	5B
(b)(iv)	5B

Question 8 (15)

(a)	5C
(b) (c)	10D

Question 9 (20)

(a)	5B
(b)	5B
(c)	10D

Question 10 (25)

(a) (b)	5C
(c)	5D
(d)(i)(ii)	15D

Question 11 (10)

(a), (b)	5D
(c)	5C

Question 12 (10)

(a), (b)	10D

Question 13 (20)

(a)(i)	5B
(a)(ii)	5C
(a)(iii)(iv)	10D

Question 14 (15)

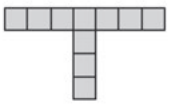
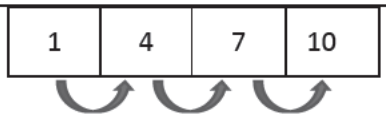
(a)	5C
(b)	10C

Model Solutions & Marking Notes

The model solutions for each question are not intended to be exhaustive – there may be other correct solutions.

Where the scheme refers to "work of merit", examples are given of the standard acceptable as work of merit in that particular part.

In general, accept a candidate's work in one part of a question for use in subsequent parts of the question, unless this oversimplifies the work involved.

Q.1	Model Solution – 20 Marks	Marking Notes
(a)		**Scale 5A (0, 5)** • Hit or Miss
(b)	 First Diff: 3 3 3 Linear sequence because each term increasing by a constant 3.	**Scale 5B (0, 2, 5)** *Partial Credit* • Get the correct first difference and stops or chooses incorrect description. • Writes linear but does not show differences or does not give any supporting statement.
(c)	Finds it manually 1, 4, 7, 10, 13, … ,148 OR Uses formula $a+(n-1)d$ $1+(50-1)3$ $1+(49)3=148$ OR Equivalent	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Identifies formula but uses incorrectly. • Some use of the difference 3. *High Partial Credit* • Finds 145 or 151, some relevant incorrect term.
(d)	Uses the formula $a+(n-1)d$ $1+(n-1)3$ $1+3n-3=3n-2$ OR Equivalent method	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Identifies correct formula or method. *High Partial Credit* • Correct substitution but incorrect final answer.

Q.2	Model Solution – 30 Marks	Marking Notes
(a)	$1\,200 \times 2\,946{\cdot}44$ TZS $= 3\,535\,728$ TZS	**Scale 5B (0, 2, 5)** *Partial Credit* • Some work of merit – e.g. Attempts to multiply or divide, yielding incorrect answer.
(b)	$6{\cdot}9606995 \times 10^7$ $= 6{\cdot}96 \times 10^7$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Some work of merit but with errors. Places the decimal point incorrectly or uses wrong index. *High Partial Credit* • Gets $6{\cdot}9606995 \times 10^7$ and stops. *Full Credit -1* Deduct a mark if answer rounded incorrectly. E.g., 6.961 x 10^7, 6.97 x 10^7
(c)	$945\,087\ km^2$	**Scale 5B (0, 2, 5)** *Partial Credit* • Places decimal point incorrectly. *Full Credit -1* Omits units
(d)	$\frac{69\,606\,995}{945\,087} = 73{\cdot}65 = 74$ people per square kilometre	**Scale 5B (0, 2, 5)** *Partial Credit* • Some work of merit e.g. attempts to divide unsuccessfully. *Full Credit -1* Gets $73{\cdot}65$ but fails to round or rounds incorrectly. Accept 74 for full marks.

(e)	$F = P(1+i)^t = 69\ 606\ 995(1+0\cdot02)^5$ $= 76\ 851\ 746\cdot95$ $= 76\ 851\ 747$ Year 1 $69\ 606\ 995 \times 102\% = 70\ 999\ 134\cdot9$ Year 2 $70\ 999\ 134\cdot9 \times 102\% = 72\ 419\ 117\cdot6$ Year 3 $72\ 419\ 117\cdot6 \times 102\% = 73\ 867\ 499\cdot9$ Year 4 $73\ 867\ 499\cdot9 \times 102\% = 75\ 344\ 849\cdot9$ Year 5 $75\ 344\ 849\cdot9 \times 102\% = 76\ 851\ 746\cdot9$ $=76\ 851\ 747$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • P, i and t identified. • Some correct substitution into formula. • Amount calculated for the first year. *High Partial Credit* • Formula fully substituted correctly. • Compound interest found for first 4 years correctly. *Full Credit -1* Deduct a mark if answer not rounded correctly.
(f)	$F = P(1+i)^t = 69\ 606\ 995(1+0\cdot02)^2$ $= 72\ 419\ 117\cdot6$ $= 72\ 419\ 118$ $72\ 419\ 118 - 69\ 606\ 995 = 2\ 812\ 123$ Year 1 $69\ 606\ 995 \times 102\% = 70\ 999\ 134\cdot9$ Year 2 $70\ 999\ 134\cdot9 \times 102\% = 72\ 419\ 117\cdot6$ $72\ 419\ 118 - 69\ 606\ 995 = 2\ 812\ 123$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • P, i and t identified. • Some correct substitution into formula. • Amount calculated for the first year. *High Partial Credit* • Formula fully substituted correctly. • Compound interest found for first 2 years correctly and stops. *Full Credit -1* Deduct a mark if answer not rounded correctly.

Q.3	Model Solution – 15 Marks	Marking Notes
(a)	Median = 6 So a = 5 Range = 12 b – 2 = 12 b = 12 + 2 So b = 14	**Scale 5B (0, 2, 5)** Accept correct answers without work. *Partial Credit* • One correct value • Indication that the median is the middle number. • Indication that the range is the difference between the largest and smallest numbers.
(b)	Median is 13, which is the average of the middle two terms. $\frac{9+d}{2}=13$ So $9+d=26$ $d=17$ Mean is 12 so $6\times12=72$ 5+7+17+18 = 47 so 72 – 47 = 25 72-47 = 25 e+c=25 e+c = 25 22+c=25 e-c = 19 c=25-22 2e = 44 c=3 e = 22 Final list 3, 5, 7, 17, 18, 22	**Scale 10D (0, 3, 5, 8, 10)** Accept correct answers without work. *Low Partial Credit* • Indication of understanding of the median in this context. • Indication of the sum of numbers. • Indication that the range is the difference between the highest and lowest numbers. • Values of c and e with e-c=19 *Mid Partial Credit* • One correct value *High Partial Credit* • Two correct values. • d correct and work towards c and e.

Q.4	Model Solution – 20 Marks	Marking Notes
(a)	$2\pi r = 240$ $r = \frac{240}{2\pi} = 38 \cdot 19 = 38 \cdot 2 \text{ m}$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Some work of merit e.g. using the circumference formula or subtracts 240 from 480. *High Partial Credit* Divide or attempts to divide 240 by 2π and stops. *Full Credit -1* Deduct a mark if answer not rounded correctly or omits units.
(b)	Rectangular part: $120 \times 76 \cdot 4 = 9168 \text{ m}^2$ Circular part: $\pi(38 \cdot 2)^2 = 4584 \cdot 33766 \text{ m}^2$ Total area = $9168 + 4584.33766 = 13\ 752 \cdot 33766 \text{ m}^2$ $= 13\ 752 \cdot 34 \text{ m}^2$	**Scale 5D (0, 2, 3, 4, 5)** Accept radius value from part (a) *Low Partial Credit* • Work of merit e.g. some correct substitution into a formula or attempt to find relevant area. • Interest calculated for the first year. *Mid Partial Credit* • One part, either rectangular or circular, fully correct. *High Partial Credit* • One part fully correct and work of merit in second part. *Full Credit -1* Deduct a mark if answer not rounded correctly or units omitted.

(c)	Speed $60km/hr$ $= 60\ 000\text{m}/\ 60\ \text{mins}$ $= 60\ 000\text{m}/3600\ \text{seconds}$ $=\frac{50}{3} m/s$ $\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{480}{\frac{50}{3}} = 28 \cdot 8\ \text{seconds}$	**Scale 5D (0, 2, 3, 4, 5)** *Low Partial Credit* • Some use of the correct formula. • An attempt to convert the given speed into minutes or seconds or km into m. *Middle Partial Credit* • Gets 60 000m or 3 600 seconds. *High Partial Credit* • Finds correct speed in m/s in fraction or decimal form. *Full Credit -1* Deduct a mark if answer not rounded correctly
(d)	Speed = 150m/min = 9000m/60 min = 9 km/hr $\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{21.1}{9} = 2 \cdot 34\ \text{hrs}$ **OR** $21100/150 = 140.6\ \text{mins}$ She did not meet her goal of completing the race in less than 2 hours.	**Scale 5D (0, 2, 3, 4, 5)** *Low Partial Credit* • Some use of the correct formula. • An attempt to convert the given speed into hours or km. *Middle Partial Credit* • Gets 9000m or 9km. *High Partial C9redit* • Finds correct time but fails to comment on meeting the goal.

<table>
<tr><th>Q.5</th><th>Model Solution – 30 Marks</th><th>Marking Notes</th></tr>
<tr><td>(a)</td><td>
<table>
<tr><th></th><th>1</th><th>2</th><th>3</th></tr>
<tr><td>A</td><td>A1</td><td>A2</td><td>A3</td></tr>
<tr><td>E</td><td>E1</td><td>E2</td><td>E3</td></tr>
<tr><td>I</td><td>I1</td><td>I2</td><td>I3</td></tr>
<tr><td>O</td><td>O1</td><td>O2</td><td>O3</td></tr>
<tr><td>U</td><td>U1</td><td>U2</td><td>U3</td></tr>
</table>
</td><td>Scale 5D (0, 2, 3, 4, 5)
Low Partial Credit
• Three, Four, Five or Six entries correct.
Mid Partial Credit
• Seven, Eight, Nine or Ten entries correct.
High Partial Credit
• Eleven, Twelve, Thirteen or Fourteen entries correct.</td></tr>
<tr><td>(b)
(i)</td><td>$\frac{3}{15}=\frac{1}{5}$</td><td>Scale 5B (0, 2, 5)
Accept either answer
Partial Credit
• Any correct numerator or denominator {3,15, 1, 5}.

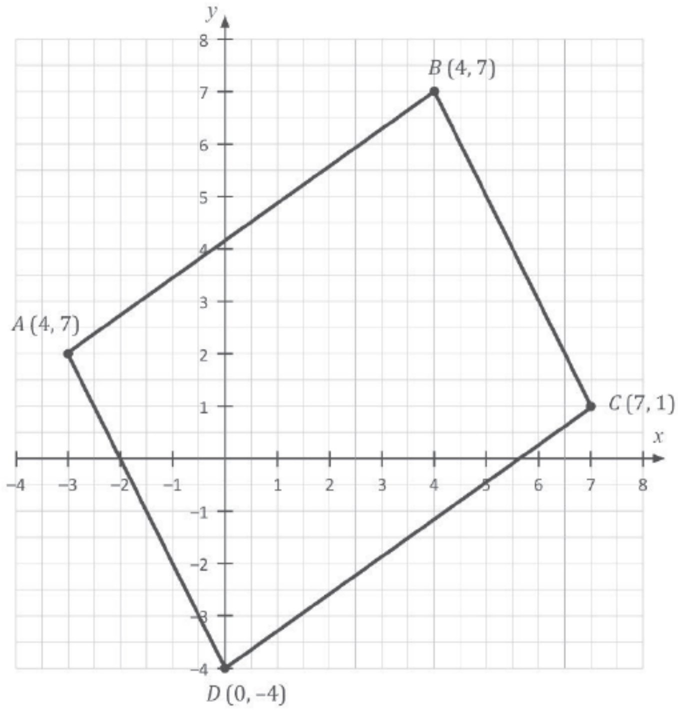
Award full marks for correct answers based on incorrect table in part (a).</td></tr>
<tr><td>(b)
(ii)</td><td>$\frac{4}{15}$</td><td>Scale 5B (0, 2, 5)
Partial Credit
• Numerator or Denominator correct

Award full marks for correct answers based on incorrect table in part (a).</td></tr>
<tr><td>(b)
(iii)</td><td>$\frac{10}{15}=\frac{2}{3}$</td><td>Scale 5B (0, 2, 5)
Accept either answer
Partial Credit
• Any correct numerator or denominator {10,15, 2, 3}.

Award full marks for correct answers based on incorrect table in part (a).</td></tr>
</table>

(b) (iv)	$\frac{4}{15}$	**Scale 5B (0, 2, 5)** *Partial Credit* • Numerator or Denominator correct Award full marks for correct answers based on incorrect table in part (a).
(b) (v)	Two extra numbers.	**Scale 5A (0, 5)** • Hit or Miss

Q.6	Model Solution – 10 Marks	Marking Notes
	$72 - 3t = 0$ $-3t = -72$ $3t = 72$ $t = \frac{72}{3} = 24$ $144 + 24 + 0 + 18 = 186$	**Scale 10C (0, 3, 7, 10)** Accept correct answer without supporting work. *Low Partial Credit* • Some work of merit e.g. adds together a number of terms. • States 'let the intersection be equal to zero or equivalent'. *High Partial Credit* • States t = 24 and stops. • Gets 234-2t and stops

Q.7	Model Solution – 30 Marks	Marking Notes
(a) **(i)** **(ii)**	 A=(-3, 2) C = (7, 1)	**Scale 10D (0, 3, 5, 8, 10)** Not necessary to join the four points together. *Low Partial Credit* • Some work of merit, for example one point plotted correctly and other is inverted. *Mid Partial Credit* • Work of merit in both parts. *High Partial Credit* • (i) or (ii) correct *Full Credit -1* Correct answers in wrong boxes. Both points not labelled in part (i)
(b) **(i)** **(ii)**	(-3, 2) (4, 7) $(-3,2)\quad(4,7)$ $\sqrt{(4-(-3))^2+(7-2)^2}$ $=\sqrt{74}$ $(0,-4)\quad(7,1)$ $\sqrt{(7-(0))^2+(1-(-4))^2}$ $=\sqrt{74}$ $\sqrt{74}=\sqrt{74}$ $(-3,2)\ (0,-4)$ $\frac{-4-2}{0-(-3)}=\frac{-6}{3}=-2$ $(4,7)\ (7,1)$ $\frac{1-7}{7-4}=\frac{-6}{3}=-2$	**Scale 10D (0, 3, 5, 8, 10)** *Low Partial Credit* • Some work of merit e.g. some correct substitution into correct formula in either (b) or (c) *Mid Partial Credit* • Fully correct substituted formulae in either (b) **or** (c). • Work of merit in both parts. *High Partial Credit* • Either (b) or (c) correct. • Correctly substituted formulae in (b) **and** (c)
(iii)	(-3, 2) (7,1)	**Scale 5B (0, 2, 5)**

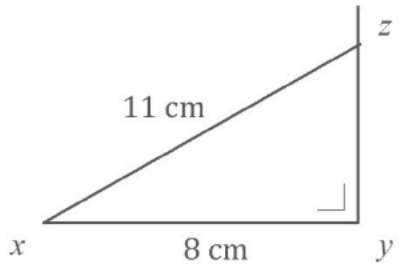
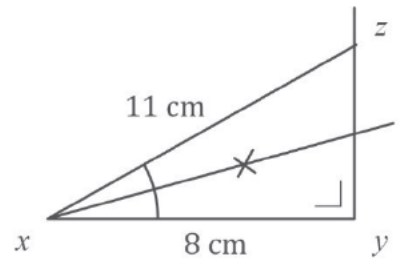
	$\left(\frac{-3+7}{2},\frac{2+1}{2}\right)$ $=\left(2,\frac{3}{2}\right)$ $(4,7)(0,-4)$ $\left(\frac{4+0}{2},\frac{7-4}{2}\right)=\left(2,\frac{3}{2}\right)$	*Partial Credit* • Some correct substitution into the correct formula
(iv)	One of the following statements are expected. The opposite sides are equal in length. The opposite sides are parallel The diagonals bisect each other or equivalent.	**Scale 5B (0, 2, 5)** Accept student's wording. *Partial Credit* • Some incomplete statement e.g. mentions opposite sides but no more.

Q.8	Model Solution – 15 Marks	Marking Notes
(a)	$5\cdot 8+0\cdot 92=6\cdot 72$ $\frac{0\cdot 92}{6\cdot 72}=\frac{1\cdot 5}{h}$ $(0\cdot 92)(h)=(1\cdot 5)(6\cdot 72)$ $h=\frac{(1\cdot 5)(6\cdot 72)}{(0\cdot 92)}=10\cdot 956=10\cdot 96\text{ m}$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Adds $5\cdot 8+0\cdot 92=6\cdot 72$ *High Partial Credit* • Sets up ratios but fails to solve correctly
(b) **(c)**	Pythagoras' Theorem $(10\cdot 96)^2+(6\cdot 72)^2=c^2$ $165\cdot 28=c^2$ $12\cdot 85\text{m}=c$ $\text{Tan}\,\theta=\frac{10\cdot 96}{6\cdot 72}$ $\theta=\text{Tan}^{-1}\left(\frac{10\cdot 96}{6\cdot 72}\right)=58\cdot 48^\circ$ $58\cdot 5^\circ$ OR equivalent ratio	**Scale 10D (0, 3, 5, 8, 10)** *Low Partial Credit* • Some work of merit e.g. some correct substitution into correct formula or ratio in either (b) or (c) *Mid Partial Credit* • Fully correct substituted formulae or ratio in either (b) **or** (c). • Work of merit in both parts. *High Partial Credit* • Either (b) or (c) correct. • Correctly substituted formulae in (b) **and** (c) *Full Credit -1* • Incorrect rounding or omitted units (m).

Q.9	Model Solution – 20 Marks	Marking Notes
(a)	$3x(4x+2)-5(2x-4)$ $12x^2+6x-10x+20$ $12x^2-4x+20$	**Scale 5B (0, 2, 5)** *Partial Credit* • Any term multiplied out correctly
(b)	$8bc-10ac+4bd-5ad$ $2c(4b-5a)+d(4b-5a)$ $(2c+d)(4b-5a)$	**Scale 5B (0, 2, 5)** *Partial Credit* • Any correct factorising.
(c)	$\frac{4}{3x+1}-\frac{2}{3+x}$ $\frac{4(3+x)-2(3x+1)}{(3x+1)(3+x)}=\frac{12+4x-6x-2}{9x+3x^2+3+x}=\frac{-2x+10}{3x^2+10x+3}$	**Scale 10 D (0, 3, 5, 8, 10)** *Low Partial Credit* • Work of merit e.g. $4(3+x)-2(3x+1)$ and stops • $12+4x-6x-2$ and no denominator *Mid Partial Credit* • Two terms correct out of $12+4x-6x-2$ and finishes correctly. • No or incorrect denominator but numerator fully correct. *High Partial Credit* • Three terms correct in numerator and finishes correctly. • Finds $\frac{12+4x-6x-2}{9x+3x^2+3+x}$ and stops.

Q.10	Model Solution – 25 Marks	Marking Notes
(a) **(b)**	$343\text{g} \div 7 = 49\text{g}$ Coconut Oil $49 \times 2 = 98\text{g}$ Palm Oil $49 \times 3 = 147\text{g}$ $900\text{g} \div 3 = 300\text{g}$ Olive Oil $300\text{g} \times 7 = 2100\text{g}$ Coconut Oil $300\text{g} \times 2 = 600\text{g}$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Some work of merit e.g. some correct division or multiplication in parts (a) or (b) *High Partial Credit* • Either (a) or (b) correct. • Correctly calculated share (either 49g or 300g) in (a) **and** (b)
(c)	$lwh = 135\ cm^3$ $(9)(6)h = 135$ $54h = 135$ $h = \frac{135}{54} = 2 \cdot 5\ \text{cm}$	**Scale 5D (0, 2, 3, 4, 5)** *Low Partial Credit* • Some substitution into the correct formula *Mid Partial Credit* • Gets the value 54 *High Partial Credit* • Divides 54 into 135 but fails to finish correctly. *Full Credit -1* Incorrect rounding or omitted units (cm).
(d) **(i)** **(ii)**	Profit: €2-€1 · 10 = €0 · 90 $\frac{0 \cdot 90}{1 \cdot 10} \times 100 = 81 \cdot 81\% = 82\%$ $\frac{0 \cdot 90}{2 \cdot 00} \times 100 = 45\%$	**Scale 15D (0, 5, 9, 12, 15)** Accept correct answers without work. Accept correct answers without percentage signs. *Low Partial Credit* • Work of merit in either (i) **or** (ii) e.g. getting 90c or multiplying by 100 *Mid Partial Credit* • Work of merit in both (i) **and** (ii) • Either (i) or (ii) correct *High Partial Credit* • One part correct **and** work of merit in the other. • Both answers given as decimals rather than percentages 0.82 and 0.45 • Calculates Margin in (i) and Mark up in (ii) *Full Credit -1* Incorrect rounding in part (i)

Q.11	Model Solution – 10 Marks	Marking Notes
(a)	$x+6$	**Scale 5D (0, 2, 3, 4, 5)** *Low Partial Credit* • Some work of merit e.g. indicates the width is x. • Some work of merit in (b), an expression in *x* set equal to 90 • Part (a) correct *Mid Partial Credit* Work of merit in both parts. *High Partial Credit* • (a) correct and work of merit in (b) • (b) correct
(b)	$x(x+6) = 90$ $x^2 + 6x = 90$ $x^2 + 6x - 90 = 0$	
(c)	a=1 b=6 c=-90 $\frac{-b \pm \sqrt{b^2-4ac}}{2a} = \frac{-6 \pm \sqrt{6^2-4(1)(-90)}}{2(1)} = \frac{-6 \pm \sqrt{396}}{2}$ $= 6 \cdot 9498 \text{ cm or } -12.95498 \text{ cm}$ $x = 6 \cdot 9 \text{ cm}$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Identifies a, b or c • Some correct substitution into the -b formula. *High Partial Credit* • Quadratic formula fully substituted • One error when filling into formula but calculated correctly • Correct answer without work *Full Credit -1* No rounding or incorrect rounding. Omits the units (cm) Negative answer not excluded

Q.12	Model Solution – 10 Marks	Marking Notes
(a)		**Scale 10 D (0, 3, 5, 8, 10)** Allow a tolerance of $\pm$ 2 mm or $\pm 2^{\circ}$ *Low Partial Credit* • One element of construction accurate e.g. one side of correct length or the right angle. • Correct overall shape but wrong size *Mid Partial Credit* • Two elements of construction accurate. One side and the angle or two sides. *High Partial Credit* • Triangle drawn correctly but error when drawing the bisected angle. • Error when stating that the angle can be measured with a protractor or fails to give a reason. Note: No need to give a measurement for the angles. Sufficient to complete the construction correctly and mention measuring with a protractor to see if equal for full marks.
(b)	 Can measure the angles with a protractor to see if they are equal OR equivalent wording.	

Q.13	Model Solution – 20 Marks	Marking Notes
(a) **(i)**	Root 1 = - 3, Root 2 = 2	**Scale 5B(0, 2, 5)** *Partial Credit* • One root correct.
(a) **(ii)**	$x=-3 \quad x=2$ $(x+3)(x-2)$ $x^2+x-6=0$ $-x^2-x+6=0$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Roots identified. • Factors created. *High Partial Credit* Work of merit in multiplying out factors. Accept incorrect roots from previous part.
(a) **(iii)** **(iv)**	4 or y = 4 $-2\cdot8, 1\cdot8$	**Scale 10D (0, 3, 5, 8, 10)** Allow a tolerance of 0.2 for part (iv) *Low Partial Credit* • Work of merit in finding (iii) **or** (iv) *Mid Partial Credit* • Work of merit in finding (iii) **and** (iv) *High Partial Credit* • One correct and work of merit in the other

Q.14	Model Solution – 15 Marks	Marking Notes
(a)	The opposite angles in a cyclic quadrilateral sum to 180 degrees. $3x+10+2x+25=180$ $5x+35=180$ $5x=180-35$ $5x=145$ $x=29^\circ$	**Scale 5C (0, 2, 3, 5)** *Low Partial Credit* • Lets angles equal to each other and solves equation to get x = 15. • Some effort to create an equation to solve. *High Partial Credit* • Sets up equation correctly but fails to solve. $3x+10+2x+25=180$
(b)	$\frac{6}{8}=\frac{x}{10}$ $8(x)=6(10)$ $8x=60$ $x=\frac{60}{8}=7\cdot5\text{ cm}$ $\frac{6}{8}=\frac{5}{y}$ $6(y)=5(8)$ $6y=40$ $y=\frac{40}{6}$ $y=\frac{40}{6}$ or $\frac{20}{3}$ or $6\cdot66\text{ cm}$	**Scale 10 C (0, 3, 7, 10)** *Low Partial Credit* • Work of merit in finding x **or** y e.g. sets up a ratio involving letter *High Partial Credit* • One correct and work of merit in the other • Note: Accept $y=\frac{40}{6}$ for full marks