



National  
Qualifications  
2015

---

## 2015 Graphic Communication

### National 5

## Finalised Marking Instructions

© Scottish Qualifications Authority 2015

The information in this publication may be reproduced to support SQA qualifications only on a non-commercial basis. If it is to be used for any other purposes written permission must be obtained from SQA's NQ Assessment team.

Where the publication includes materials from sources other than SQA (secondary copyright), this material should only be reproduced for the purposes of examination or assessment. If it needs to be reproduced for any other purpose it is the centre's responsibility to obtain the necessary copyright clearance. SQA's NQ Assessment team may be able to direct you to the secondary sources.

These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments. This publication must not be reproduced for commercial or trade purposes.

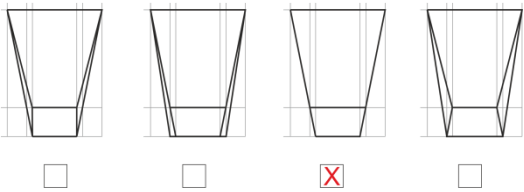


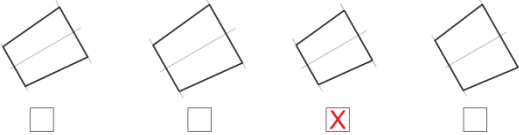
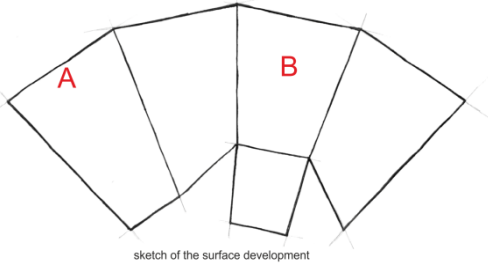
## General Marking Principles for National 5 Graphic Communication

*This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.*

- (a) Marks for each candidate response must always be assigned in line with these General Marking Principles and the Detailed Marking Instructions for this assessment.
- (b) Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.
- (c) If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader.

Detailed Marking Instructions for each question

Question		Expected Answer(s)	Max Mark	Additional Guidance
1.	(a)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>The graphic can be used for promotional/marketing reasons.</li> <li>The graphic can aid discussions with the client prior to manufacture.</li> <li>This type of graphic is more universally understood.</li> <li>This type of graphic is more easily understood by non-technical people.</li> <li>Provides a realistic representation of the product.</li> </ul>	2	Do not accept; 'How the product looks'
	(b)	Exploded isometric view.	1	Do not accept 'Exploded view', 'isometric' or 'Exploded'
	(c)	<p>Any one from:</p> <ul style="list-style-type: none"> <li>This type of graphic is more <b>informative</b> than the 3D CAD illustration</li> <li>It lets the viewer see how the product is assembled</li> <li>It lets the viewer see all the component parts of the product.</li> </ul>	1	Any response which relates to showing technical detail should be accepted.
	(d)		1	
	(e)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>Project title/title</li> <li>Name/name of draughtsperson/designer/approver.</li> <li>Start date/completion date/print date/date</li> <li>Scale</li> <li>Drawing number/sheet number</li> <li>Dimensional tolerances.</li> <li>Dimensional units used.</li> <li>Document/drawing type</li> </ul>	2	

Question		Expected Answer(s)	Max Mark	Additional Guidance	
	(f)		1		
	(g)		2	<p>'A' must be indicated at top edge of panel or in close proximity to award mark</p> <p>'B' can be placed anywhere on that panel to award mark</p>	
	(h)	(i)	Visible outlines and edges	1	Accept 'outline'
		(ii)	Bend Lines/Fold Lines	1	
		(iii)	Centre Lines	1	
	(i)	Any answer which details a reduction of waste materials or environmental concerns.		1	
	(j)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Use of natural textures such as the grass.</li> <li>• Green colour scheme is instantly recognisable with eco products.</li> <li>• Colour green is recognisable as being linked to nature, outdoors and similar connotations.</li> <li>• Brown 'natural' background/ Printed on brown 'natural' coloured paper.</li> <li>• Logo directly references nature/natural environment (leaves).</li> <li>• Amount of ink used has been kept to a minimum (lots of white space/line drawing uses less).</li> </ul>		2	Mark should only be awarded for reference to slogan if it is regarding colour choice.

Question	Expected Answer(s)	Max Mark	Additional Guidance
2. (a)	<ul style="list-style-type: none"> <li>Create initial profile making reference to correct dimensions (1 mark)</li> <li>Extrude profile 40mm (1 mark)</li> <li>Fillet edges 20mm front and back (1 mark)</li> <li>Create new sketch on any one of the three flat ends (circle DIA 20mm) (1 mark)</li> <li>Extrude circle 40 mm (1 mark)</li> <li>Repeat last stage on the two remaining flat ends (1 mark)</li> </ul>	6	<p>Accept any other possible modelling techniques</p> <p>Ensure any supporting sketches/drawings are taken into account when awarding marks</p> <p>Apply F.O. where appropriate.</p>
(b)		2	One mark for each
(c)	CAD Library	1	Responses should contain the term 'library'

Question	Expected Answer(s)	Max Mark	Additional Guidance																				
3. (a)	<table border="1"> <thead> <tr> <th>angle</th> <th>matching system</th> <th>angle</th> <th>quantity</th> </tr> </thead> <tbody> <tr> <td>Bracket 1</td> <td> / </td> <td>90°</td> <td>2</td> </tr> <tr> <td>Bracket 2</td> <td> / </td> <td>20°</td> <td>2</td> </tr> <tr> <td>Bracket 3</td> <td> / </td> <td>106°</td> <td>2</td> </tr> <tr> <td>Bracket 4</td> <td> / </td> <td>90°</td> <td>4</td> </tr> </tbody> </table>	angle	matching system	angle	quantity	Bracket 1	/	90°	2	Bracket 2	/	20°	2	Bracket 3	/	106°	2	Bracket 4	/	90°	4	6	<p>Candidates must identify both end shapes correctly to achieve 1 mark for each bracket</p> <p>One mark for each correct quantity.</p> <p>Answers for 1 &amp; 4 may be reversed</p>
angle	matching system	angle	quantity																				
Bracket 1	/	90°	2																				
Bracket 2	/	20°	2																				
Bracket 3	/	106°	2																				
Bracket 4	/	90°	4																				
(b)		5	<p>One mark per response shown in red.</p> <p>Accept any other method of clear indication of faces.</p>																				

Question	Expected Answer(s)	Max Mark	Additional Guidance
(c)	<p>Any four from:</p> <ul style="list-style-type: none"> <li>• Create impact - Bold/Bright/Vivid orange colour, contrasting colours (accept black &amp; white), contrast of graphics to background; items 'stand out'; reverse, use of bold text.</li> <li>• Encourage further exploration of the product - minimal information provided to entice consumers; silhouette graphics of chair do not give a complete picture/ understanding of the product. Website/URL is provided.</li> <li>• Provide basic details of function - abstract graphics of the 'matching system' (triangle, square and hexagon) and pictorial view of corner bracket hint at the products function. Text on back of postcard gives information on function.</li> <li>• Appeal to a target audience of 18-40 year old males and females, font styles, non-gender specific colour choice and simple graphics appeal to both genders and age group. None of the graphic elements mentioned above exclude any section of the target market based on gender or age.</li> <li>• Create a modern feel to the layout - background and graphics bleed to edges, minimal/simple overall style, use of white space, unconventional layout.</li> <li>• Create a sense of depth - overlapping elements (text and graphics)</li> </ul>	4	<p>Marks should only be awarded where the candidate has <b>described how</b> the postcard has met the correct specification point.</p> <p>Candidates can be awarded additional marks for more than one response on a single specification point.</p>

Question	Expected Answer(s)	Max Mark	Additional Guidance
(d)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Is capable of reaching a larger target audience</li> <li>• Post production editing is possible</li> <li>• The electronic item can be adapted or expanded at a later date.</li> <li>• Can impart more information about the product to the viewer.</li> <li>• Hyperlinks to other aspects of the company can be included</li> <li>• Ability to interact with the electronic promotional item</li> <li>• No printing costs</li> <li>• No waste of printing materials</li> <li>• Flexibility to send/share in a number of ways.</li> <li>• Transport costs.</li> </ul>	2	<p>Accept any relevant environmental benefits.</p> <p>Do not accept 'cheaper' or 'quicker' unless justified.</p> <p>Do not accept answers relating to 'reduced storage space' or anything which is a by-product of electronic promotional processes.</p>
(e)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Graphic elements such as the logo, chair silhouette and shapes can be stored centrally and reused.</li> <li>• Graphic elements can be dragged and dropped if the programs used are compatible.</li> <li>• Having the elements already created saves time and effort.</li> <li>• Font matching is easier</li> <li>• Colour matching is easier</li> <li>• Editing is possible of pre-existing graphics</li> </ul>	2	

Question		Expected Answer(s)	Max Mark	Additional Guidance
4.	(a)	Revolve Technique; <ul style="list-style-type: none"> <li>• Create 2D sketch of profile (1 mark)</li> <li>• Correctly dimensioned gap between profile and centre axis (1 mark)</li> <li>• Revolve sketch 360 degrees around centre axis (1 mark)</li> </ul>	3	Although Revolve is most efficient method, also accept Extrusion Technique; <ul style="list-style-type: none"> <li>• Sketch circle of 65mm diameter</li> <li>• Extrude 22mm</li> <li>• Fillet both edges radius 8mm</li> <li>• Sketch Dia 8 mm circle,</li> <li>• Subtract all material</li> <li>• Sketch Dia 16mm,</li> <li>• Subtract 10mm</li> </ul> 2 steps = 1 mark 4 steps = 2 marks 6-7 steps = 3 marks <p>Reference must be made to subtract or subtraction. Do not accept 'Cut' or any other software specific terms.</p>
	(b)	<u>Idea One</u> Any of: <ul style="list-style-type: none"> <li>• Silhouettes are aligned <b>centrally</b> (vertically).</li> <li>• The letter E of 'Equilibrium' aligns with top of the body of text.</li> <li>• Any reference to the white line running down the board with regard to alignment also acceptable.</li> <li>• Wheels of skateboard are aligned with the 'i' letters.</li> <li>• White circles centrally aligned.</li> </ul> <u>Idea Two</u> Any of: <ul style="list-style-type: none"> <li>• Body text and website have been <b>centrally</b> aligned with each other.</li> <li>• Lack of alignment creates "movement" on the graphic, reflecting the nature of the product</li> <li>• Wheels of skateboard are aligned with the 'i' letters.</li> </ul>	4	No more than 3 marks can be awarded to either idea <p>Response must make reference to relationship between <b>separate</b> items.</p>

Question		Expected Answer(s)	Max Mark	Additional Guidance
	(c) (i)	<ul style="list-style-type: none"> <li>• (White) line &amp; circles</li> <li>• Image against the orange background.</li> <li>• Black logo with orange background</li> <li>• White against orange background</li> <li>• Black text/image against white images</li> <li>• Text directions</li> <li>• Text styles</li> </ul>	1	Responses need to make reference to specific elements.
	(ii)	<p>Any one from:</p> <ul style="list-style-type: none"> <li>• White line running down the board ties elements together.</li> <li>• Use of line running down centre of board and line running through Equilibrium.</li> <li>• Repetition of (white) circles creates unity.</li> <li>• Black title and black text/image</li> <li>• Images are all white.</li> </ul>	1	Candidates should be specific about which features are in unity.
	(d)	<p>Any two from:</p> <ul style="list-style-type: none"> <li>• Allows designer to check for any errors/mistakes before final print.</li> <li>• Designer can show layout to client before final print.</li> <li>• Scaled down version uses less ink/toner/paper.</li> <li>• Can be printed quickly on a desktop printer - no need for specialist output equipment.</li> </ul>	2	

Question		Expected Answer(s)	Max Mark	Additional Guidance
	(e)	<ul style="list-style-type: none"> <li>• Plan view is upside down/ projected in 1<sup>st</sup> angle</li> <li>• No letter labels on cutting plane</li> <li>• Value of 75 on elevation is on wrong side of dimension line</li> <li>• Missing centre lines on sectional end elevation</li> <li>• Web has been sectioned</li> <li>• Inconsistent hidden detail lines</li> <li>• Leader lines touching</li> <li>• Cutting plane missing thick ends</li> <li>• Wrong line type used for centre lines on 3<sup>rd</sup> angle projection symbol</li> <li>• Inconsistent application of 3<sup>rd</sup> angle projection.</li> </ul>	5	<p>1 mark awarded per fault</p> <p>Ensure that any sketches/annotations on the drawing are taken into account when awarding marks.</p>

[END OF MARKING INSTRUCTIONS]