



# basic education

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Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**ENGINEERING GRAPHICS AND DESIGN P1**

**NOVEMBER 2010**

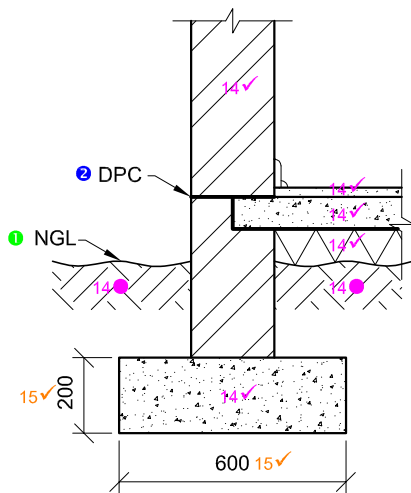
**MEMORANDUM**

**MARKS: 100**

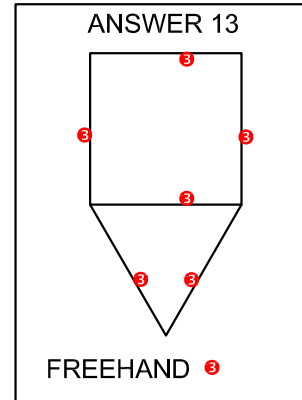
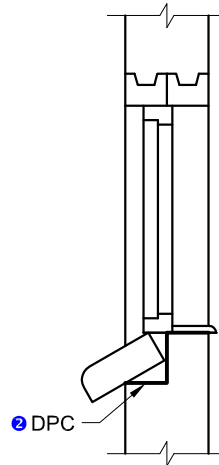
**This memorandum consists of 5 pages.**



ANSWERS 1, 2, 14 & 15



ANSWER 2

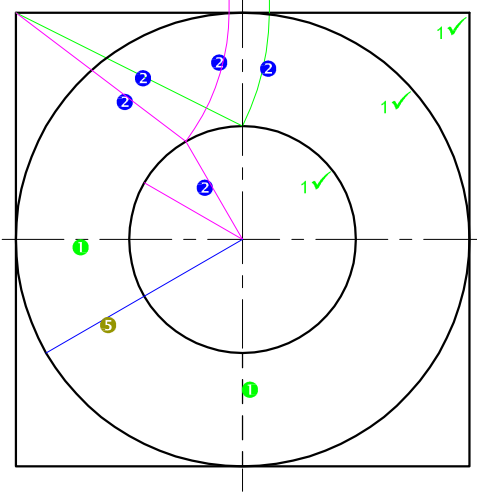
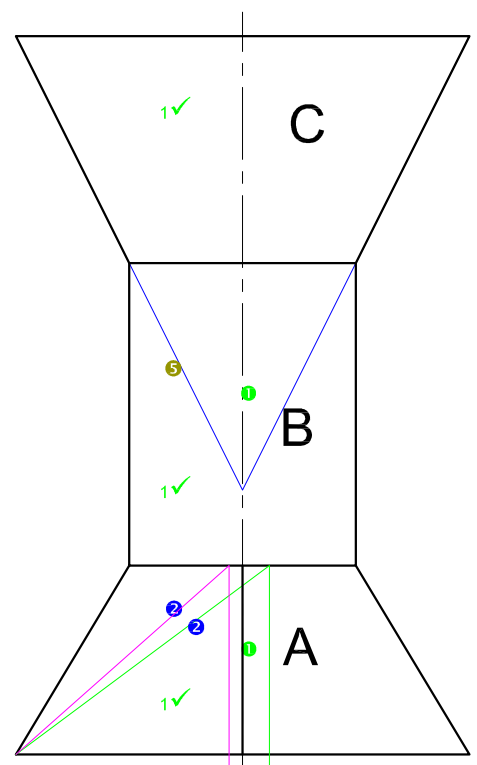
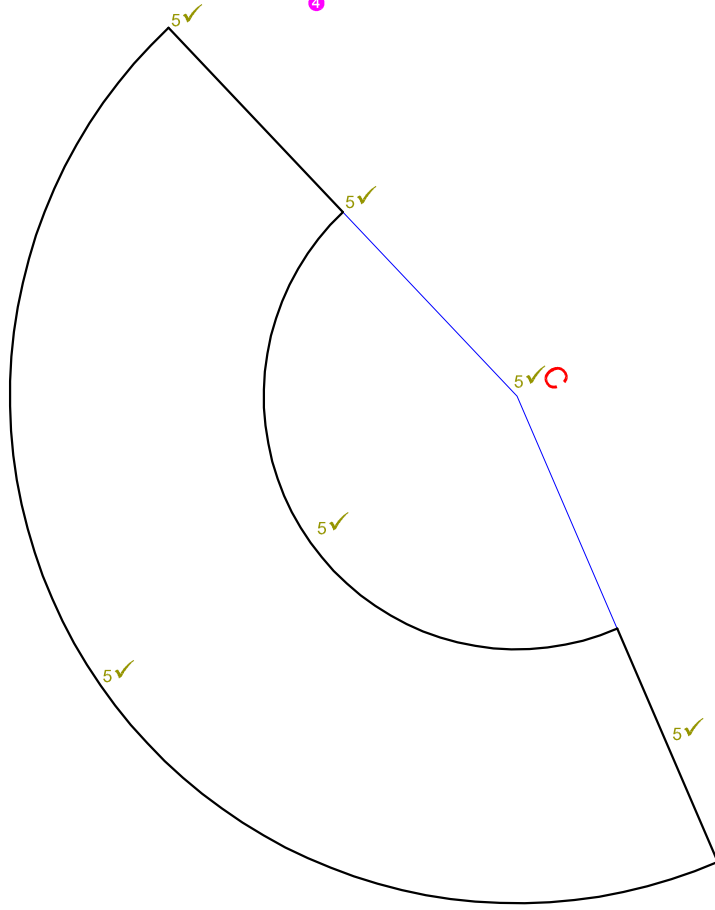
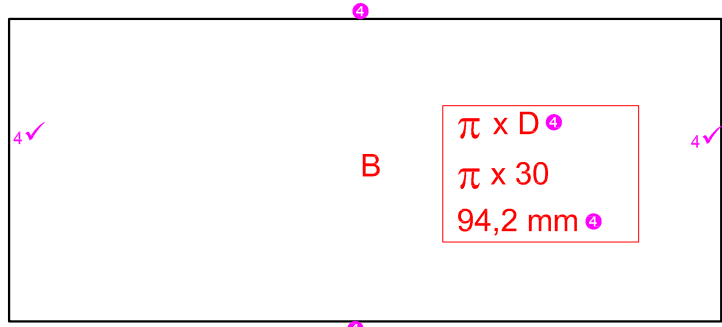
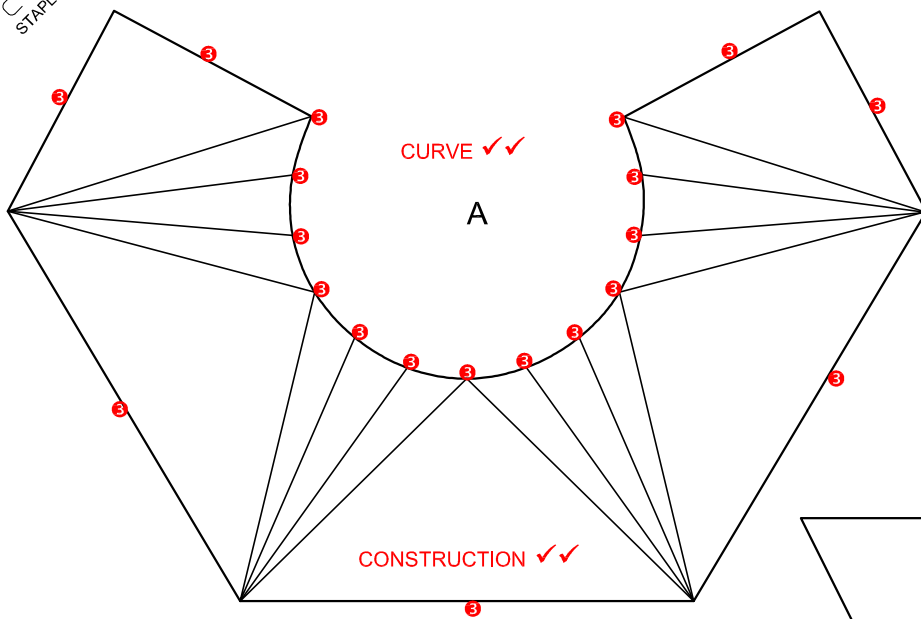


ANSWERS		
1		1/2
2		1
3	A. RAFTER	1
	B. GANG NAIL/TRUSS PLATE/NAIL PLATE	1
	C. TIE BEAM	1
	D. WALL PLATE	1
4	TILES	1
5	LINTEL/BEAM	1
6	TO CARRY/SUPPORT THE WEIGHT ABOVE THE WINDOW.	1
7	TO INDICATE THAT THE WALL IS CONTINUING	1
8	CAVITY WALL	1
9	FOR DISABLED PEOPLE	1
10	3	1
11	ND6/6 & ND9/12	2
12	$5.766 \times 5.036 = 29.0376 \text{ m}^2$ <span style="color: green;">●</span> $2.124 \times 2.124 = 4.5114 \text{ m}^2$ <span style="color: green;">●</span> $4.5114 / 2 = 2.2557 \text{ m}^2$ <span style="color: green;">●</span> $29.0376 - 2.2557 = 26.7819 \text{ m}^2$ <span style="color: green;">✓</span>	4
13		1/32
14		6
15		2

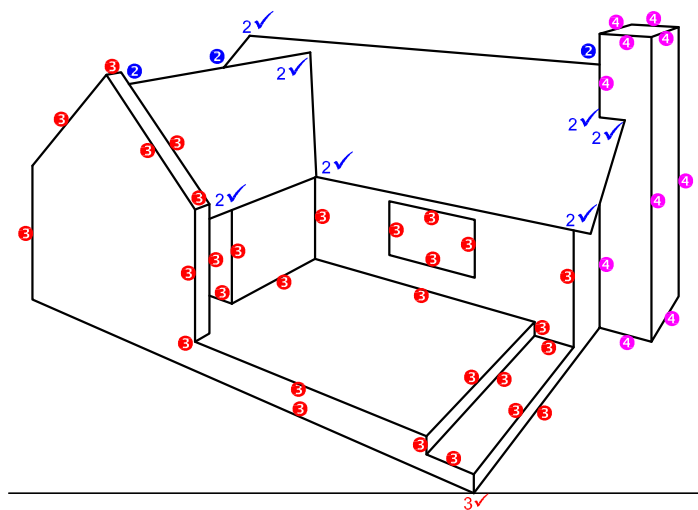
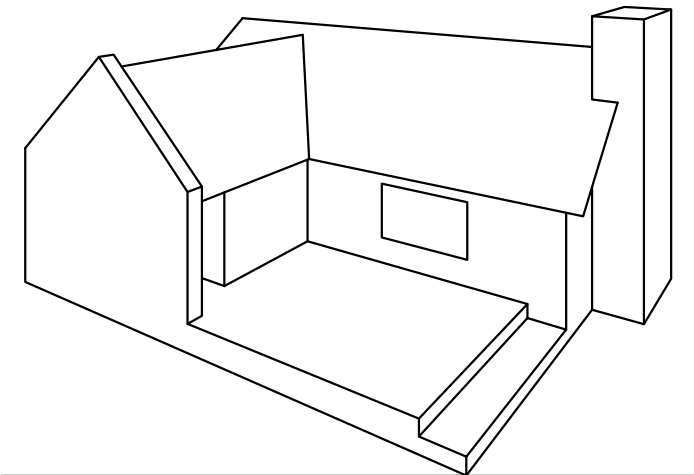
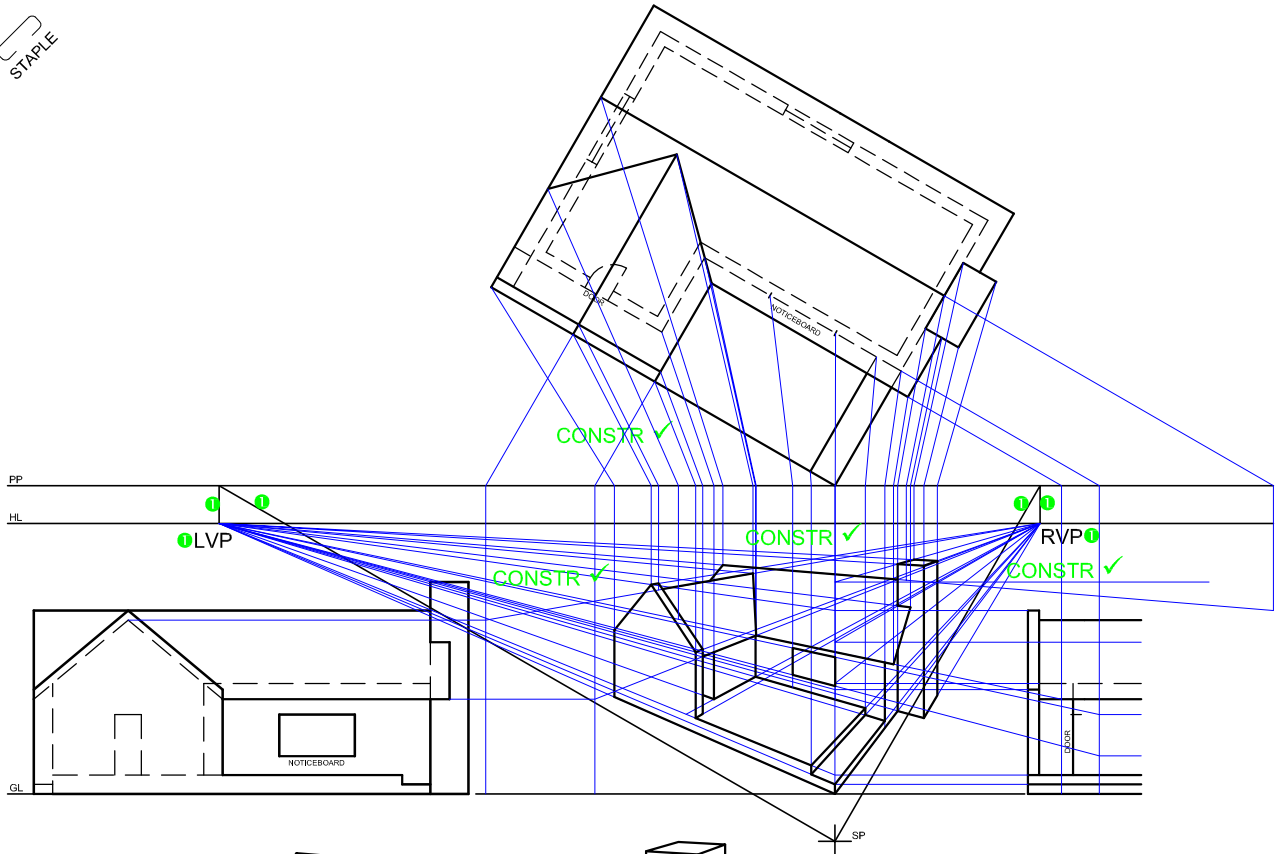
TOTAL: 30

ASSESSMENT CRITERIA	
1. GIVEN	8
2. TRUE LENGTHS	4
3. DEVELOPMENT A	14
4. DEVELOPMENT B	4
5. DEVELOPMENT C	7
<b>TOTAL</b>	<b>37</b>

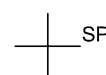
STAPLE



PAPER 1 QUESTION 2  
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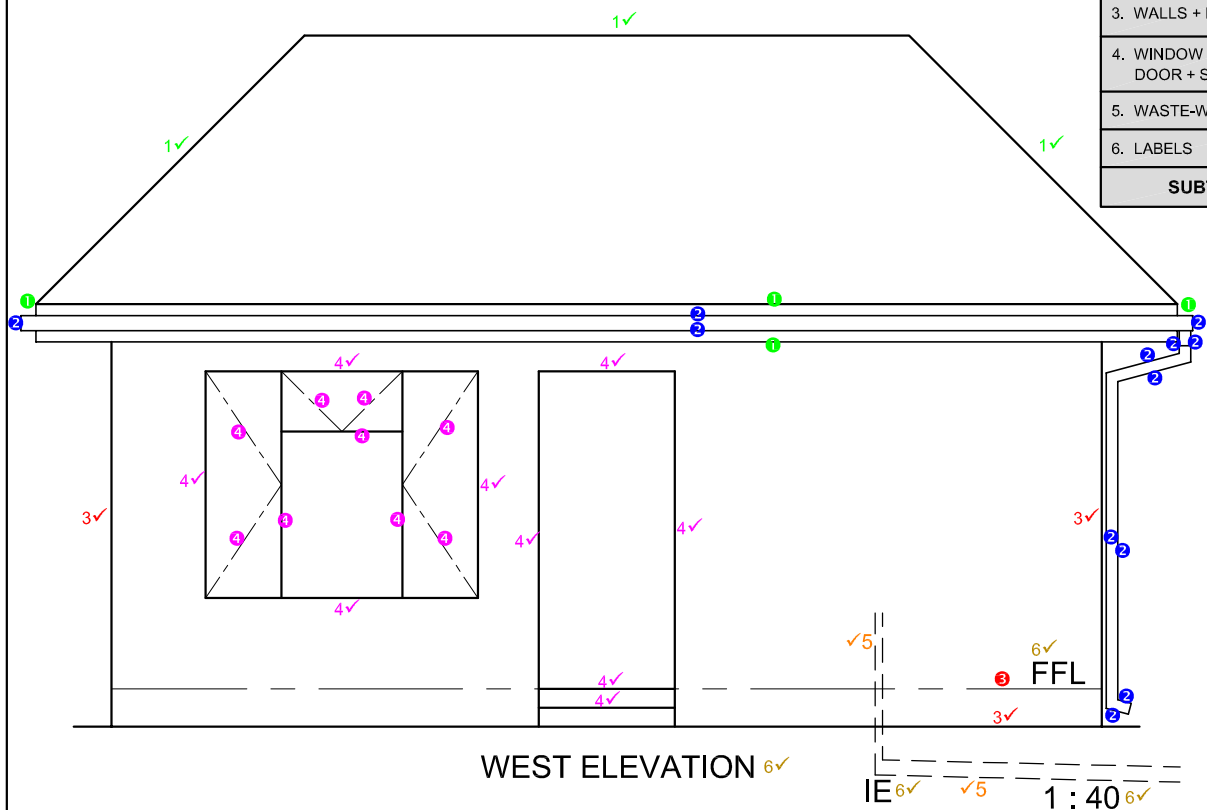
ASSESSMENT CRITERIA	
1. CONSTRUCTION + VPs	7
2. ROOF	8½
3. WALLS + WINDOW	15½
4. CHIMNEY	5
<b>TOTAL</b>	<b>36</b>



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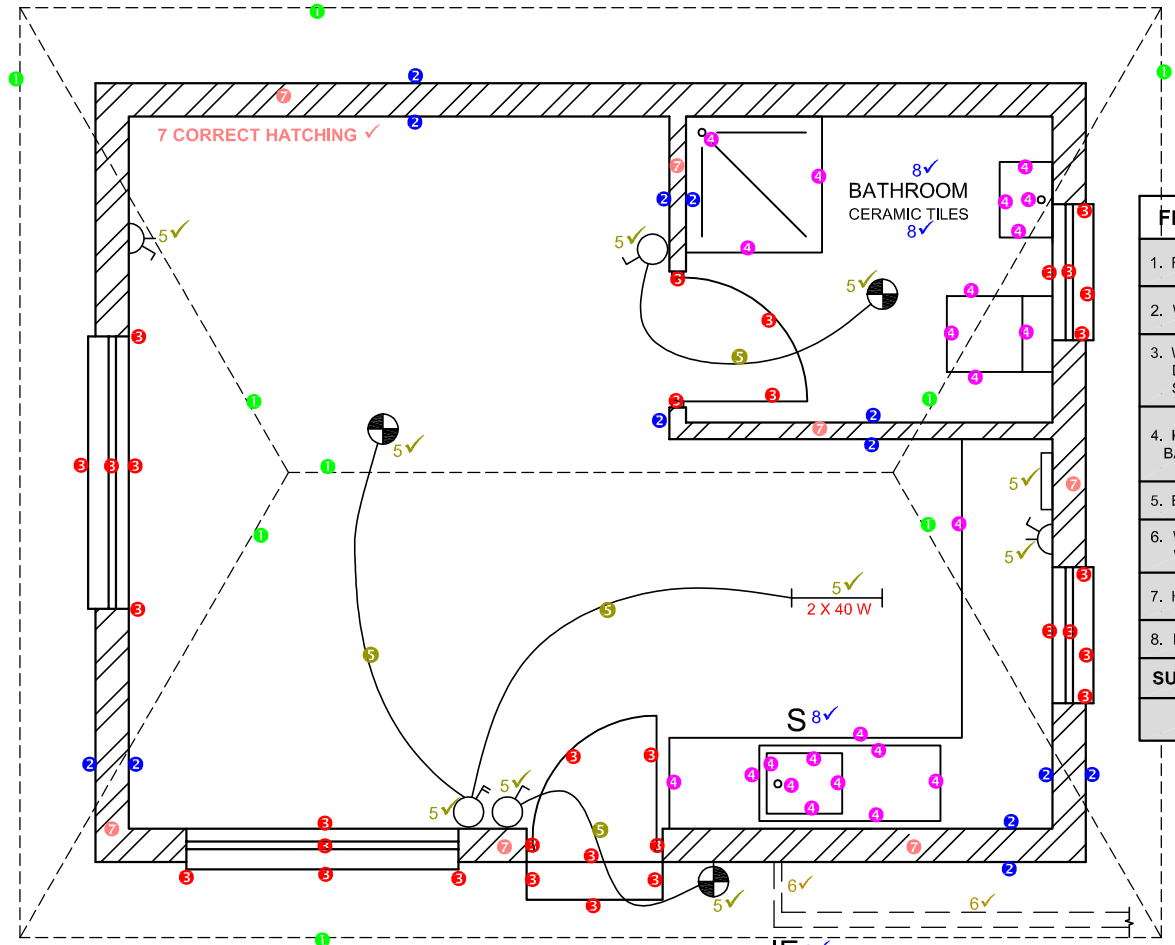


WEST ELEVATION	
1. ROOF + FASCIA	5
2. GUTTER + RWDP	6
3. WALLS + FFL	3½
4. WINDOW + DOOR + STEP	13½
5. WASTE-WATER	2
6. LABELS	4
<b>SUBTOTAL</b>	<b>34</b>



WEST ELEVATION 6✓

IE 6✓ ✓5 1:40 6✓



FLOOR PLAN	
1. ROOF	4½
2. WALLS	6½
3. WINDOW + DOOR + STEP	16
4. KITCHEN + BATHROOM	11½
5. ELECTRIC	12
6. WASTE-WATER	2
7. HATCHING	4½
8. LABELS	6
<b>SUBTOTAL</b>	<b>63</b>
<b>TOTAL</b>	<b>97</b>

FLOOR PLAN 8✓  
SCALE 1:50 8✓

IE 8✓

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