



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P1

NOVEMBER 2024

MARKING GUIDELINES

MARKS: 100

These marking guidelines consist of 7 pages.

ANSWERS		
1	DRAWING NUMBER	1
2	D <u>BRITS</u>	1
3	<u>CHEETAH</u> PRINTERS	1
4	POLOKWANE	1
5	<u>ADD WATER TANK</u>	1
6	1173,5	1
7	BUILDING LINE	1
8	WILLOW TREE	1
9	2000	1
10	TO BE REMOVED / DEMOLISHED	1
11	<u>WATER</u> STORAGE <u>TANK</u>	1
12	PAVERS	1
13	BUILT-IN CUPBOARD	1
14	BROWN	1
15	16,58 ✓ CONVERTED TO METRES ✓	2
16	NORTH-EAST / NE	2
17	22	2
18	See below	3
19		3
20		4
TOTAL		30

ANSWER 18

Show ALL calculations.

ADDING OF SIDES (+, +, ...) ✓

$$P = AB + BC + CF + FA$$

$$= (76,77 + 63,34 + 76,77 + 63,34)$$

$$= 280,22 \quad \text{CONVERTED TO METRES}$$

ANSWER 19

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

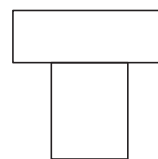
$$A = L \times B$$

$$= (17,5 \times 9,6) + (3,5 \times 10,7) + (7,7 \times 1,5) + (10,7 \times 2,4 / 2)$$

$$= 168 + 37,45 + 11,55 + 12,84$$

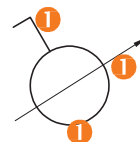
$$= 229.84 \text{ m}^2$$

ANSWER 20.1



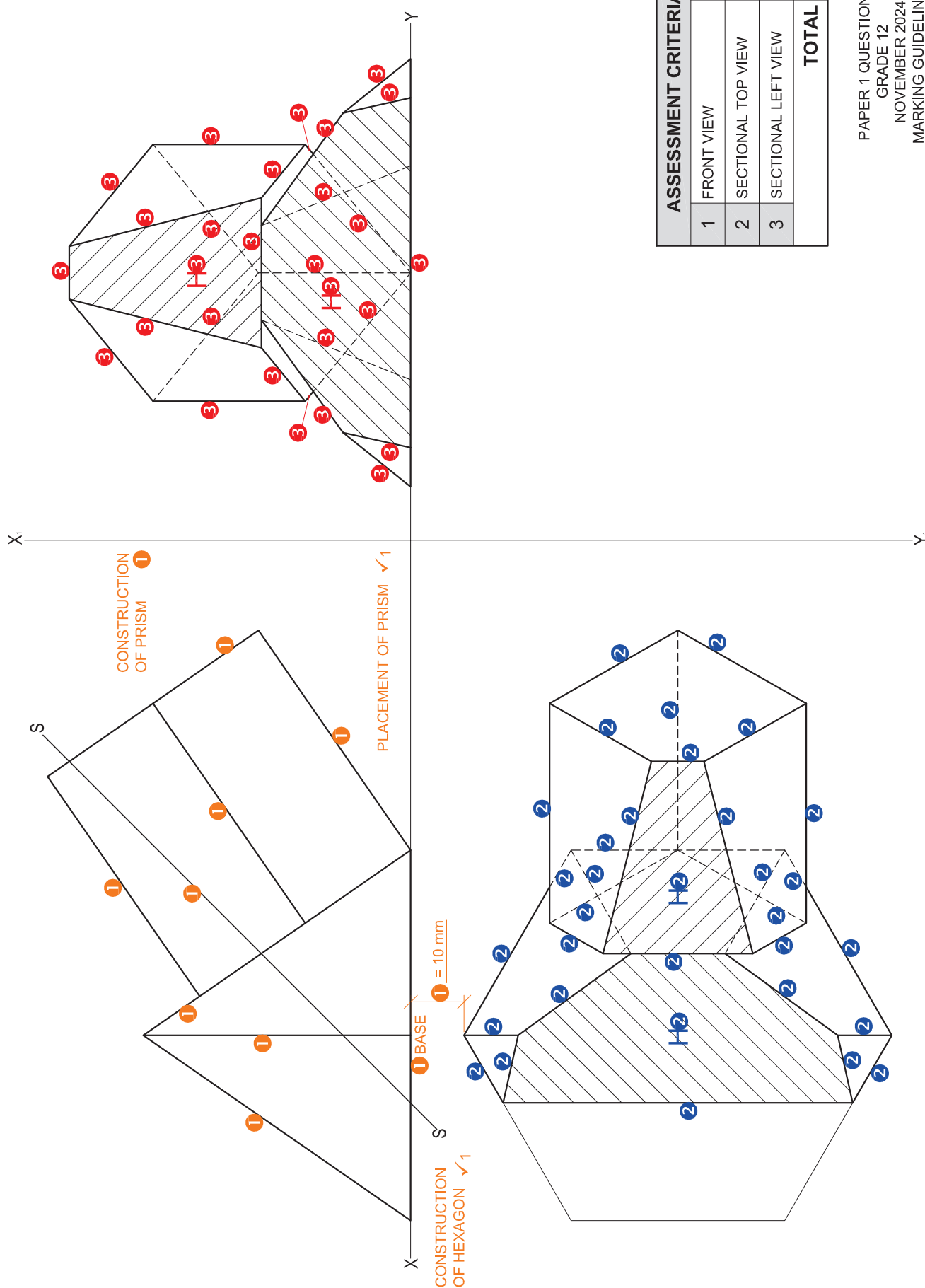
TOP RECTANGLE ✓
BOTTOM RECTANGLE ✓

ANSWER 20.2



1 BOTH IN
FREEHAND

PAPER 1 QUESTION 1
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MARKING GUIDELINES



ASSESSMENT CRITERIA	
1	FRONT VIEW
2	SECTIONAL TOP VIEW
3	SECTIONAL LEFT VIEW
TOTAL	

PAPER 1 QUESTION 2
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ASSESSMENT CRITERIA

1	CONSTRUCTION	6
2	FLOOR + STEPS	12
3	WINDOWS + DOOR	9 $\frac{1}{2}$
4	ROOF	7
5	ARC	5 $\frac{1}{2}$
TOTAL		40

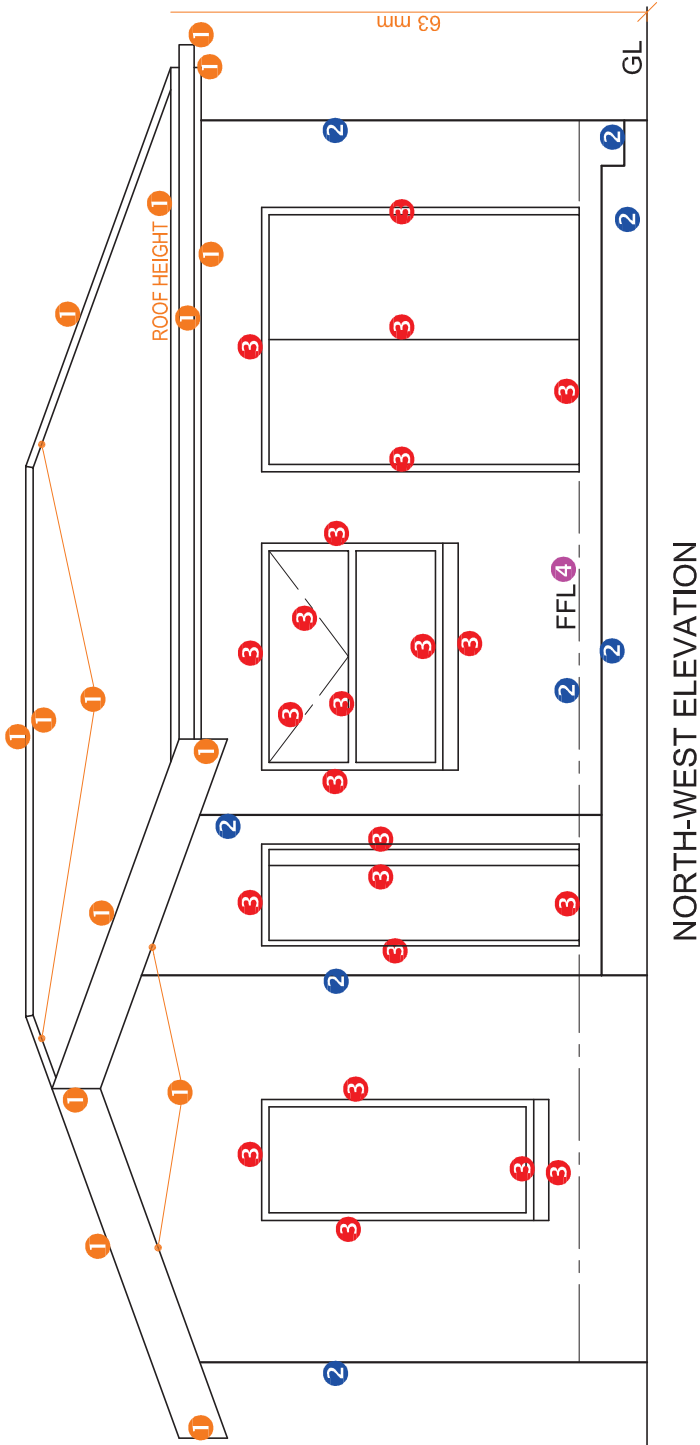
PAPER 1 QUESTION 3
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ASSESSMENT CRITERIA	
FLOOR PLAN	
1	DOORS + WINDOWS 14
2	FIXTURES 7
3	ELECTRICAL $7\frac{1}{2}$
4	LABELS 2
5	HATCHING 3
SUBTOTAL 33 $\frac{1}{2}$	

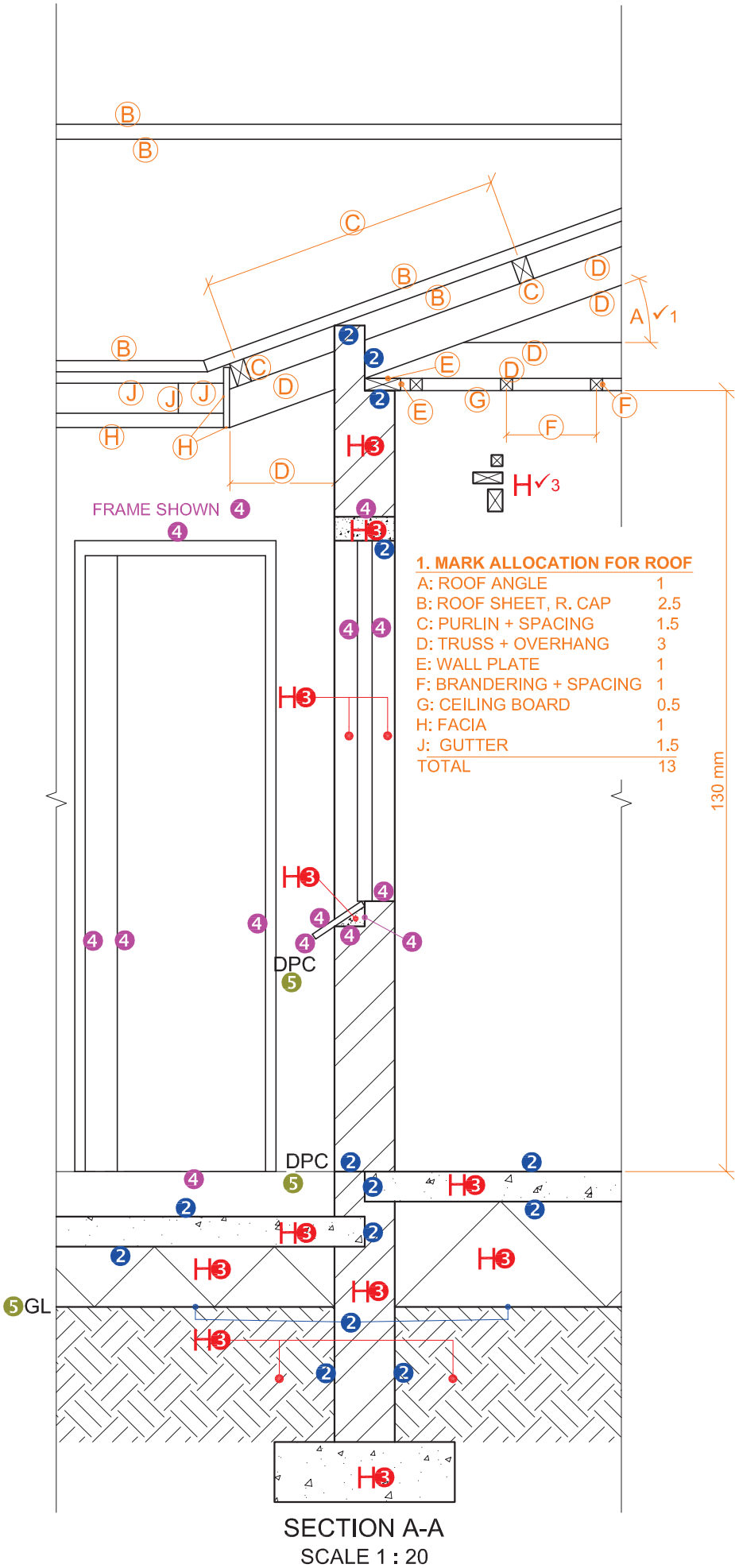
FLOOR PLAN
SCALE 1 : 50

5. HATCHING ALLOCATION	
1 SANS COMPLIANT (TYPE)	
2 HATCHING CORRECTLY APPLIED	
3 TOTAL	



ASSESSMENT CRITERIA	
NORTH-WEST ELEVATION	
1	ROOF + RWDp7 1 2
2	WALLS + STEPS4
3	DOORS + WINDOWS11 1 2
4	LABELS1 2
SUBTOTAL	
23 1 2	

PAPER 1 QUESTION 4
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ASSESSMENT CRITERIA		
DETAILED SECTION		
1	ROOF DETAIL	13
2	SLAB + WALL	7
3	HATCHING	6 ¹ / ₂
4	WINDOW + DOOR	7
5	LABELS	1 ¹ / ₂
SUBTOTAL		35

PAPER 1 QUESTION 4
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