

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P1

NOVEMBER 2011

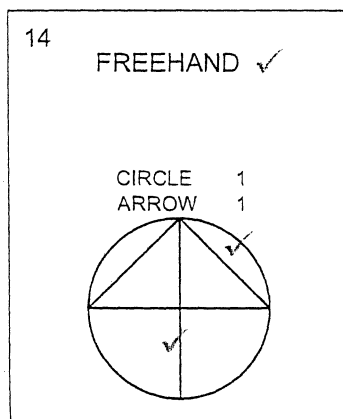
POSSIBLE ANSWERS

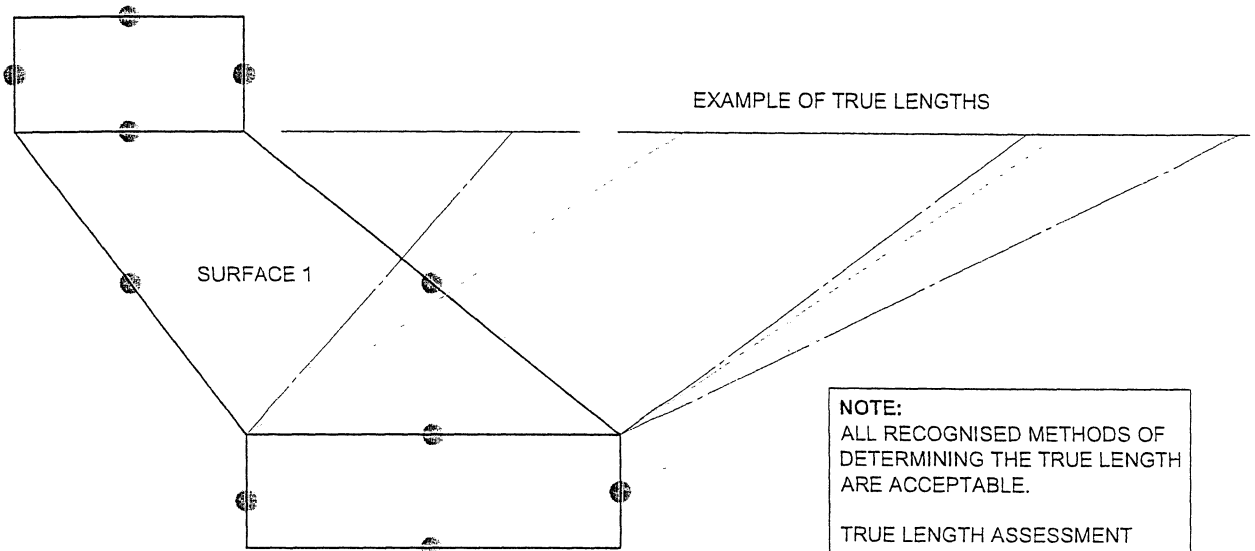
MARKS: 100

This memorandum consists of 5 pages.

ANSWERS		
1	7	1
	2	1
	10	1
	4	1
	9	1
	3	1
	1	1
	6	1
	8	1
	5	1
2	2/08	1
3	ROCKY ROAD	1
4	SEWER LINE	1
5	ROAD	1
6	UNIT/BUILDING/SUITE/CONSULTING ROOM 9	1
7	BRICK PAVING/WALKWAY	1
8	BUILDING LINE	1
9	4	1
10	10	1
11	A (1558,2)	2
12	456,6 m [calculation 1, answer 1, metres 1]	3
13	12916,8 m ² [calculation 1, answer 1, metres ² 1]	3
14		3

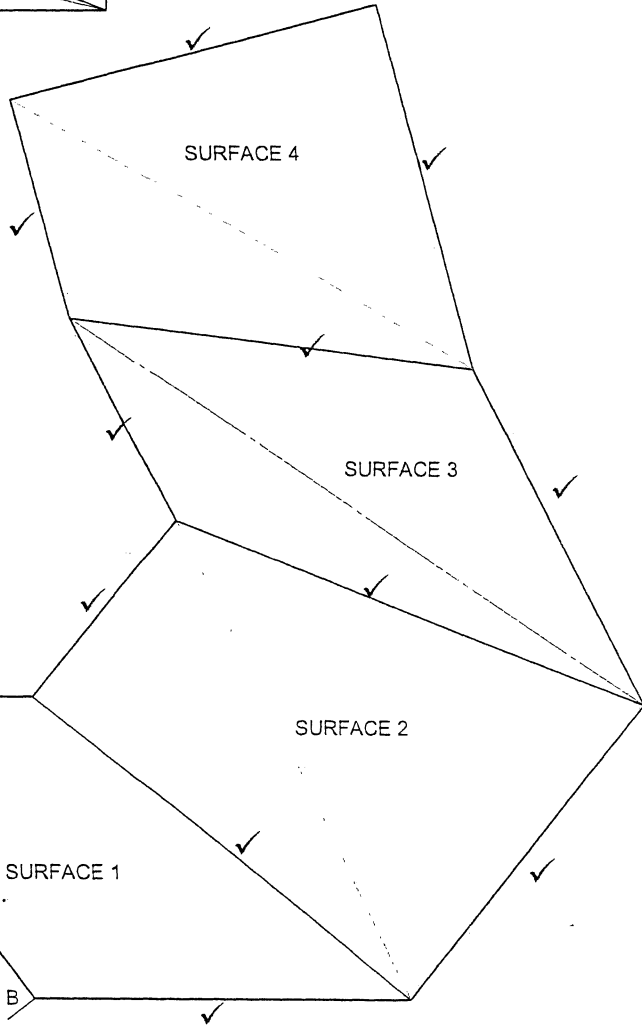
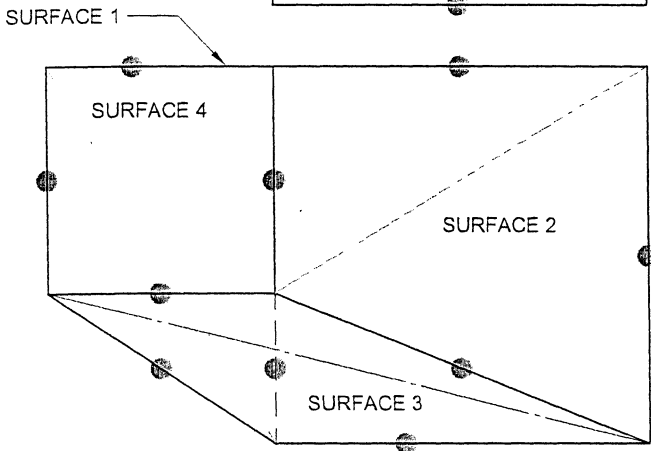
TOTAL: 30



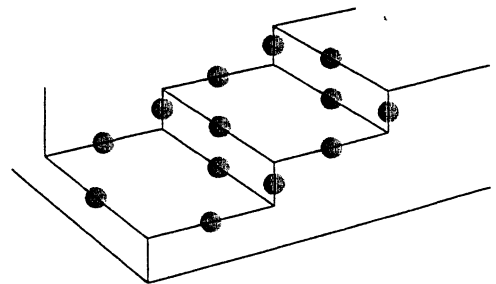
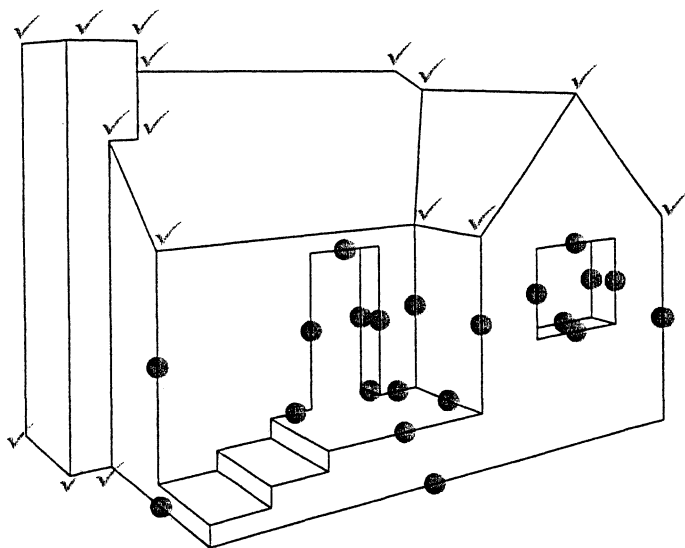
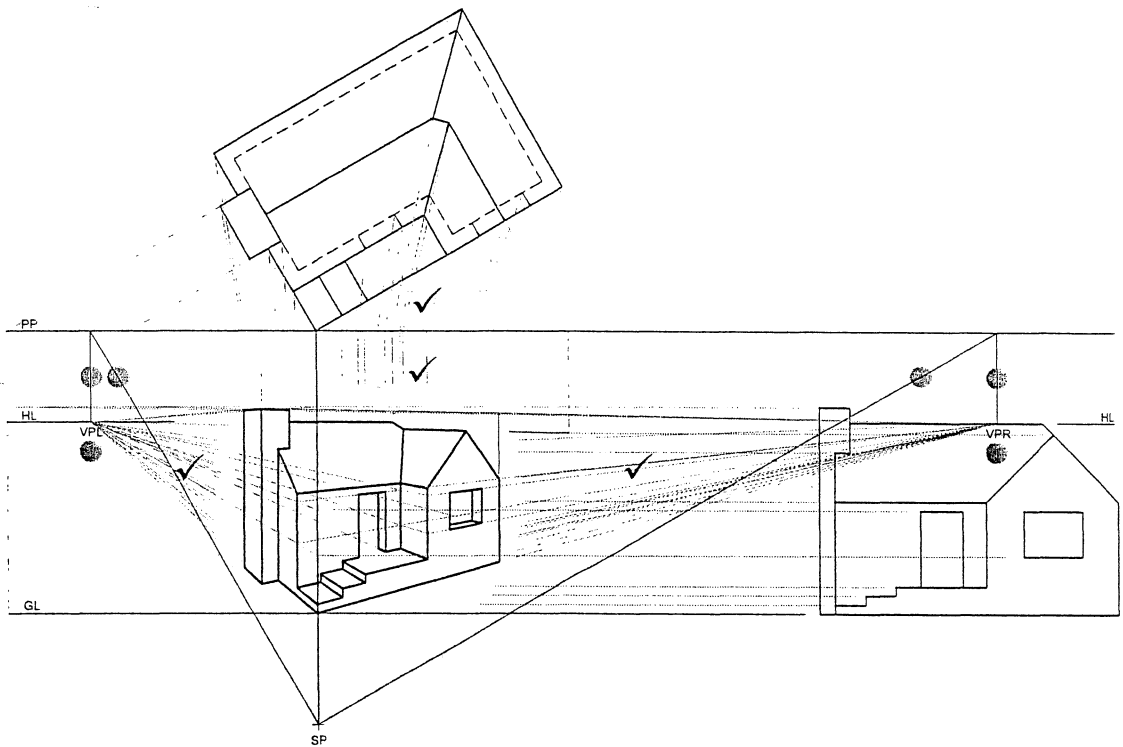


NOTE:
 ALL RECOGNISED METHODS OF
 DETERMINING THE TRUE LENGTH
 ARE ACCEPTABLE.

TRUE LENGTH ASSESSMENT
 5 x LINES = 5
 5 x METHOD = $\frac{5}{10}$



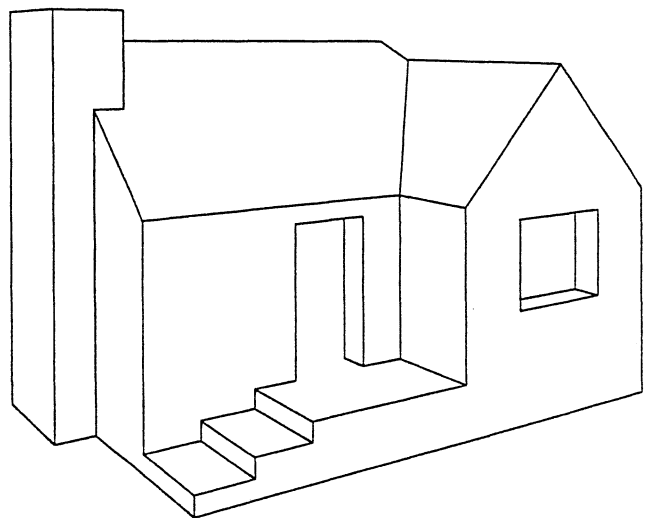
ASSESSMENT CRITERIA	
FRONT VIEW + TOP VIEW	10
TRUE LENGTH + METHOD	10
DEVELOPMENT	14
TOTAL	34



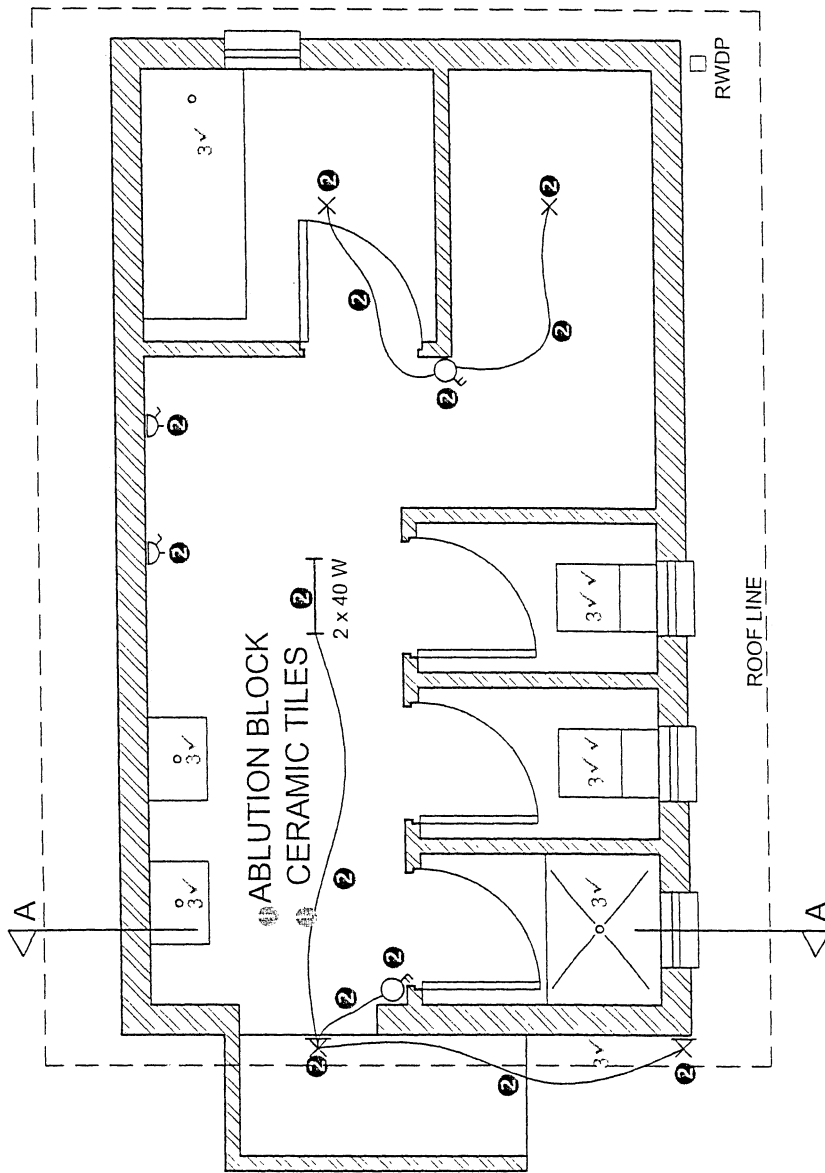
✓ DETAIL OF MARK ALLOCATION FOR STEPS (7)

+

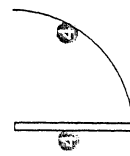
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ASSESSMENT CRITERIA	
CONSTRUCTION + VPs	7
BUILDING	18
ROOF + CHIMNEY	16
TOTAL	41



PLAN
SCALE 1 : 50

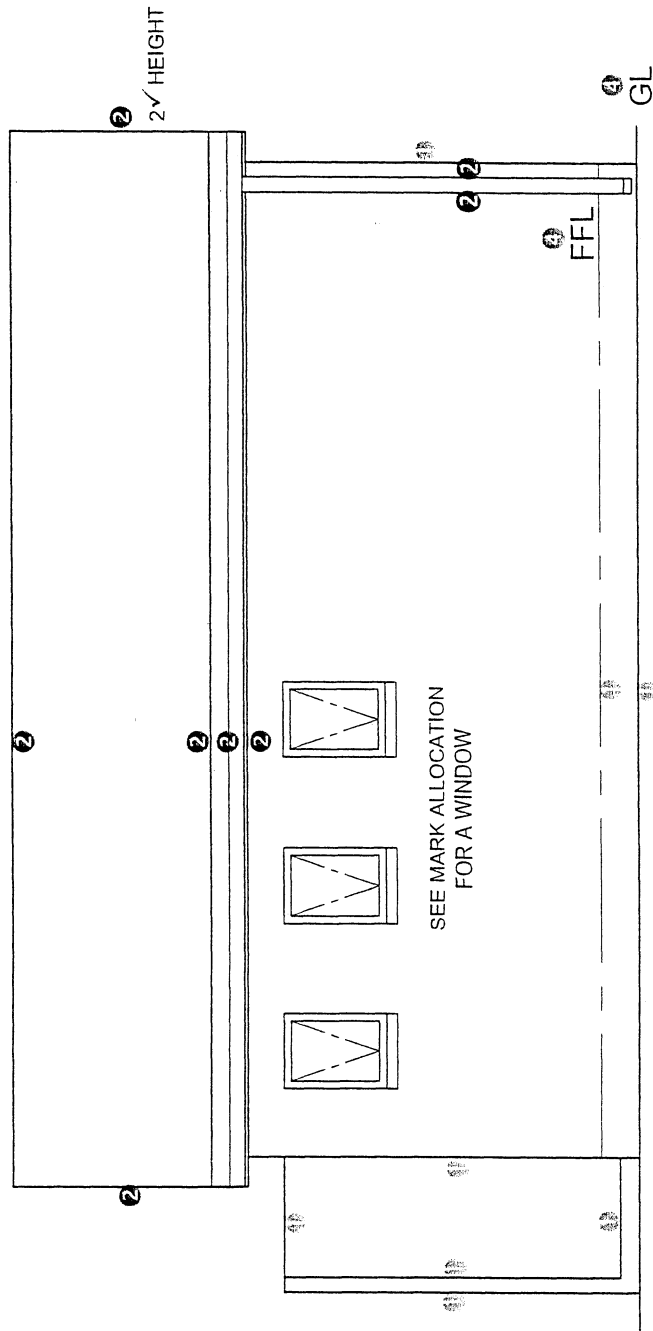


DETAIL OF MARK ALLOCATION FOR A DOOR (1 x 4 doors = 4)

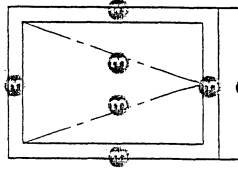


DETAIL OF MARK ALLOCATION FOR A WINDOW (2 1/2 x 4 windows = 10)

FLOOR PLAN		
1	LABELS	2
2	ELECTRICAL	7
3	FIXTURES	8
4	DOORS + WINDOWS	14
SUBTOTAL		31



DETAIL OF MARK ALLOCATION FOR A WINDOW
 (3½ per window x 3 windows = 10½)

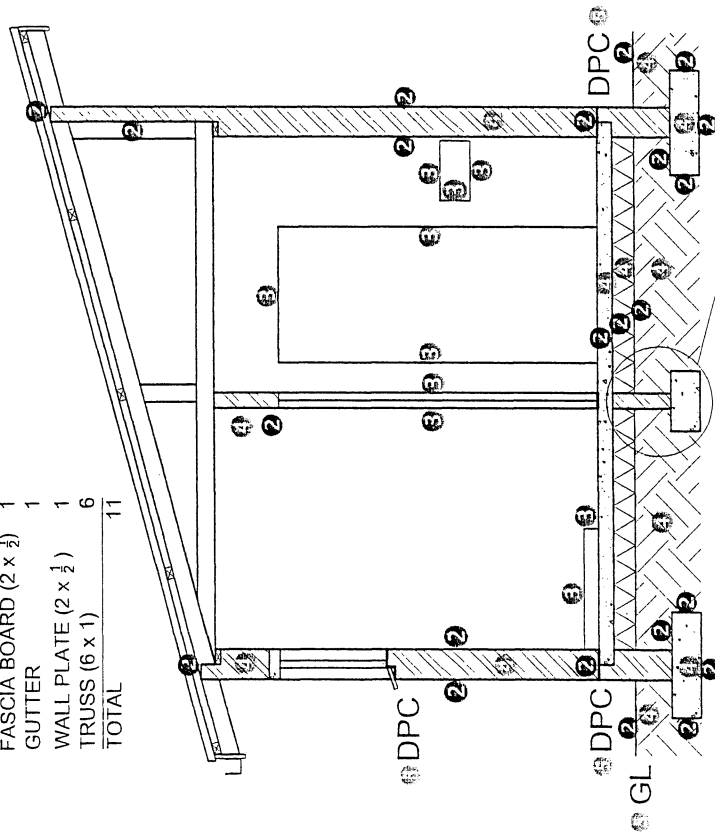
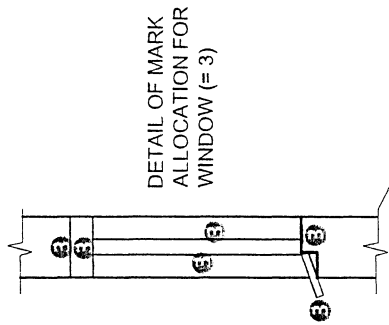


⊕ NORTH ELEVATION

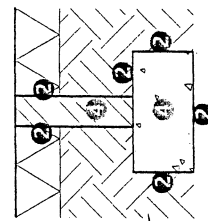
NORTH ELEVATION	
1	WALLS + FFL 4
2	ROOF + FASCIA + GUTTER + RWDP 5
3	WINDOWS 10½
4	LABELS 1½
SUBTOTAL 21	

MARK ALLOCATION

ROOF SHEET	1
PURLINS	1
FASCIA BOARD (2 x 1/2)	1
GUTTER	1
WALL PLATE (2 x 1/2)	1
TRUSS (6 x 1)	6
TOTAL	11



DETAIL OF MARK ALLOCATION FOR NON-LOAD-BEARING WALL



SECTIONAL ELEVATION		
1	ROOF	11
2	WALLS + FLOOR + FOUNDATION	14 1/2
3	WINDOW + DOORS + FIXTURES	8
4	HATCHING	7
5	LABELS	2 1/2
SUBTOTAL		43