



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

KWAZULU - NATAL

GRADE 12

MEMO

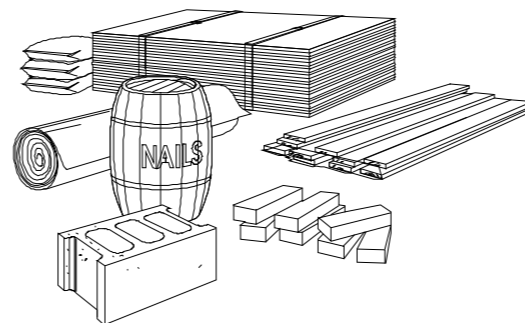
ENGINEERING GRAPHICS AND DESIGN TRIAL P1

AUGUST / SEPTEMBER 2009

MARKS: 200

TIME: 3 hours

This question paper consists of 6 PAGES.



INSTRUCTIONS AND INFORMATION

1. The paper consists of FOUR questions and SIX pages.
2. Answer ALL the questions.
3. All drawings must be drawn to scale 1:1, unless otherwise stated.
4. The questions must be answered on the answer sheets provided.
5. All the answer sheets must be re-stapled in numerical sequence and handed-in irrespective of whether the question was attempted or not.
6. Careful time management is essential in order to complete all the questions.
7. Print your name in the block provided on every answer sheet.
8. All answers must be drawn accurately and neatly.
9. Any details or dimensions not given must be assumed in good proportion.

FOR OFFICIAL USE ONLY			
			MODERATED MARK
1		27	
2		37	
3		46	
4		90	
TOTAL		200	

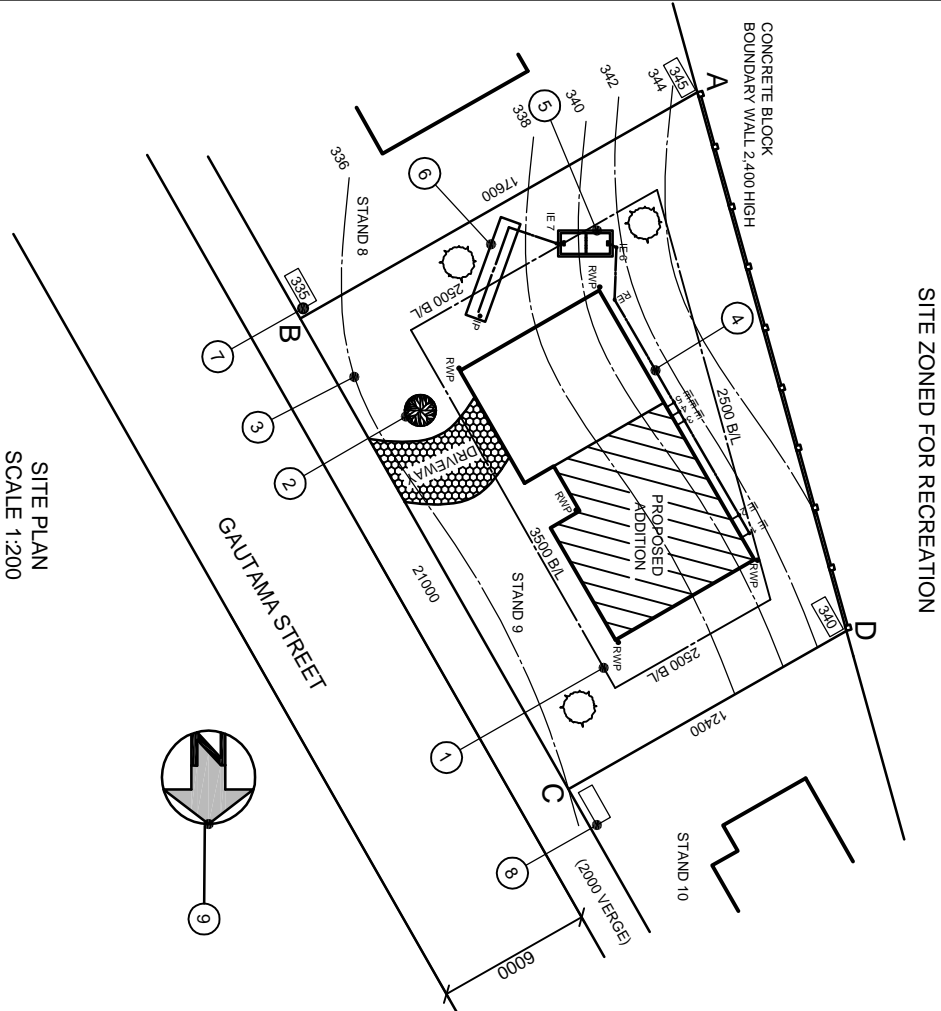
LEVEL	CHECKED BY

COMPLETE THE FOLLOWING:
NAME
GRADE /DIVISION

Please turn over

QUESTION ONE - CIVIL ANALYTICAL

Refer to the site plan below and answer the questions that follow. **27 Marks**



SITE PLAN
SCALE 1:200

QUESTIONS

ANSWERS

01	What scale was used to draw the site plan?	1:200	1
02	What is the name of the street?	GAUTHAMA STREET	1
03	What lies on the south west of stand 9?	RECREATIONAL SITE	1
04	State in metres, the length of the boundary wall?	21.6 metres	2
05	What is the area of stand 9?	315m ²	2
06	What is the width of the street in metres?	6 metres	1
07	What does the abbreviation IE stand for?	INSPECTION EYE	1
08	What does the abbreviation RE stand for?	RODDING EYE	1
09	What colour must the proposed addition be on the site plan?	RED	1
10	Which elevation faces the street?	NORTH EAST	1
11	What is the line at 1 called?	FRONT BUILDING LINE	1
12	What is the feature at 2 called?	TREE	1
13	What is the feature at 3 called?	CONTOUR LINE	1
14	What does the line at 4 represent?	SEWER PIPE / LINE	1
15	What is the feature at 5 called?	SEPTIC TANK	1
16	Name the feature at 6.	SOAK PIT/RENCH DRAIN	1
17	What is the feature at 7 called?	CORNER HEIGHT	1
18	What will the value at 8 be?	336 metres	1
19	What does the symbol at 9 represent?	NORTH POINT	1
20	What is the distance in metres, from the front building line to the boundary?	3.5 metres	1
21	Would stand 9 be above or below road level?	ABOVE	1
22	What finish is used on the driveway?	BRICK PAVING	1
23	State the perimeter of stand 9.	72.6 metres	2
24	What is the difference in height between A and C?	9 metres	1

27

NAME	
NAAM	

QUESTION THREE
 The figure below show the three views of a dwelling.
 Draw a neat two-point perspective of the dwelling.

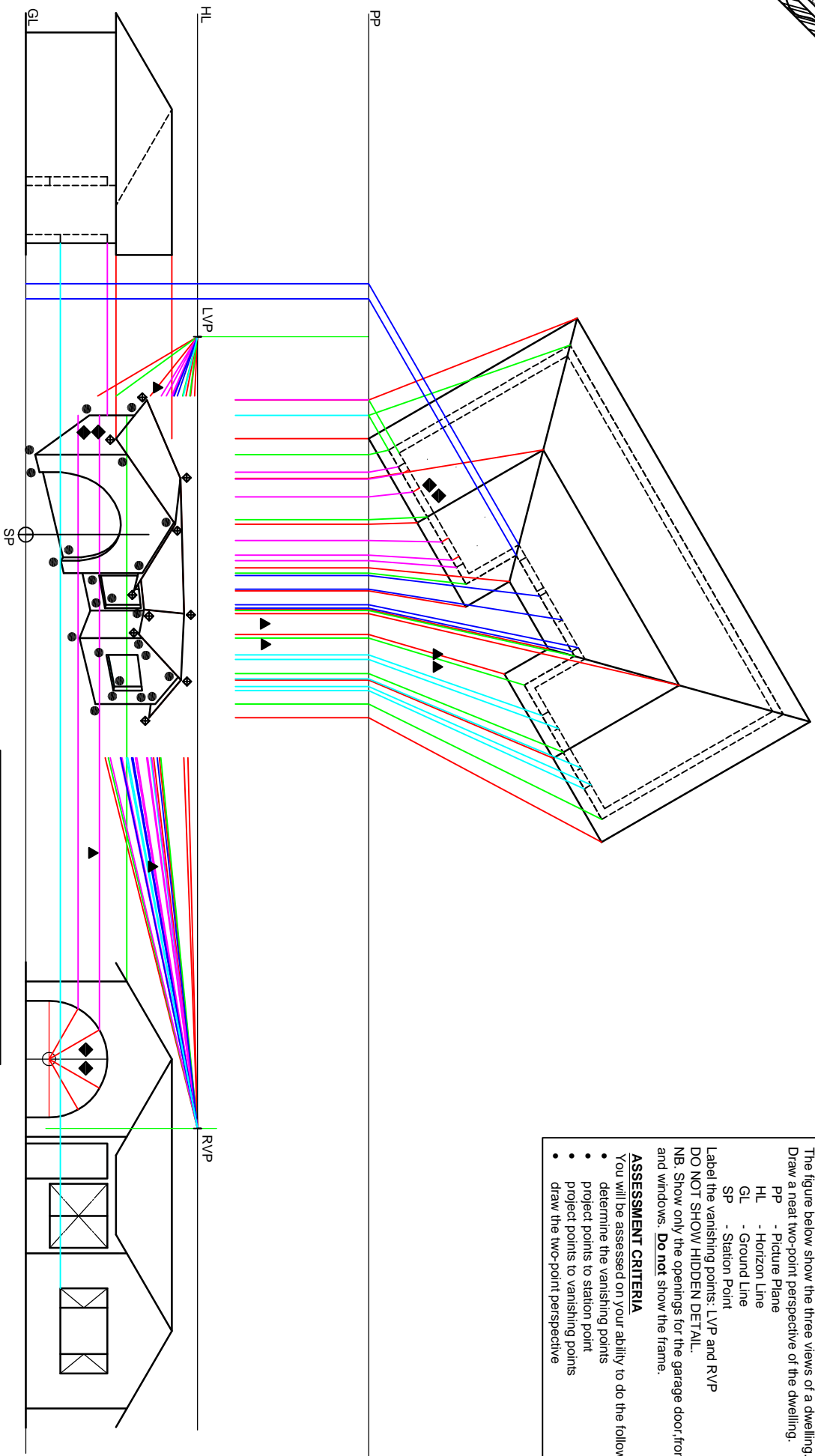
PP - Picture Plane
 HL - Horizon Line
 GL - Ground Line
 SP - Station Point

Label the vanishing points: LVP and RVP
 DO NOT SHOW HIDDEN DETAIL.
 NB: Show only the openings for the garage door, front door and windows. Do not show the frame.

ASSESSMENT CRITERIA
 You will be assessed on your ability to do the following:

- determine the vanishing points
- project points to station point
- project points to vanishing points
- draw the two-point perspective

46

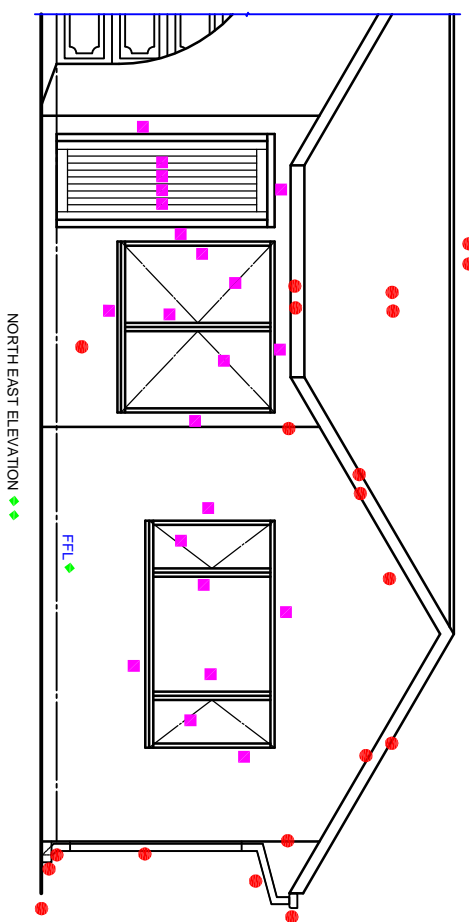


ASSESSMENT CRITERIA			
▲ Projection	=	7	
◆ Circle construction	=	6	
● Walls, window openings and door	=	23	
◆ Roof	=	10	
TOTAL		46	

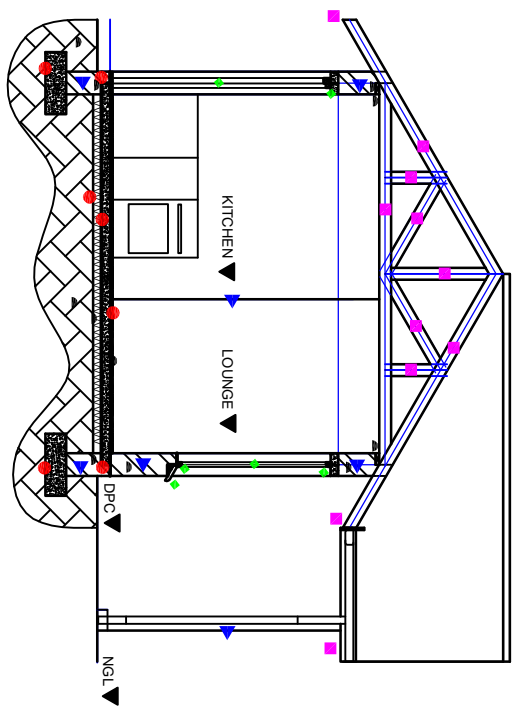
NAME _____

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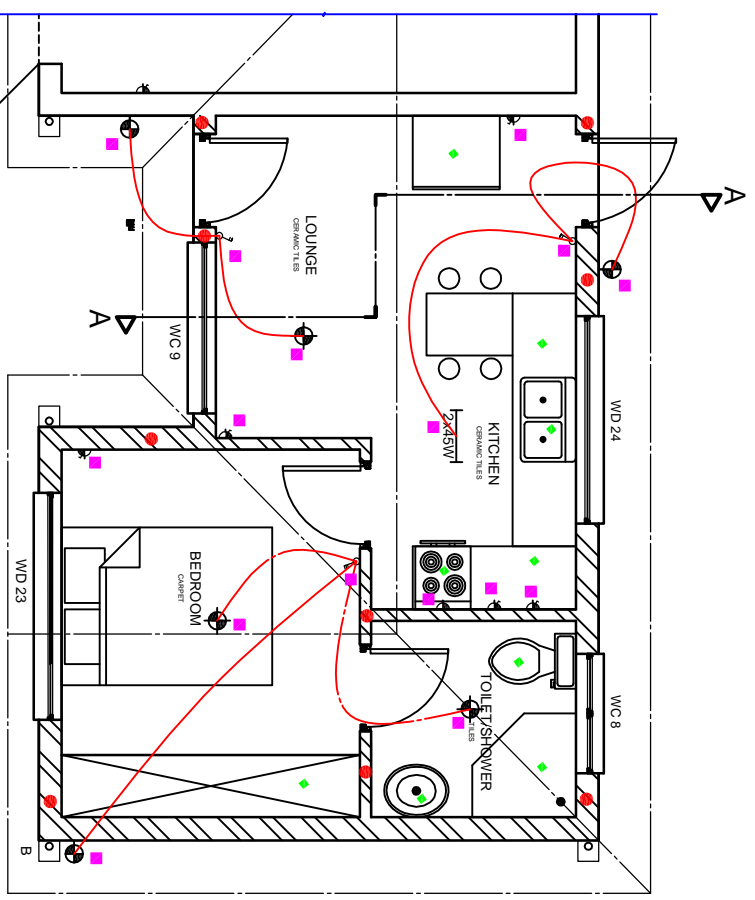
QUESTION FOUR - CIVIL DRAWING



NORTH EAST ELEVATION



SECTION AA



FLOOR PLAN
SCALE 1:50



ASSESSMENT CRITERIA		
FLOOR PLAN	Hatching	10
	Sanitary and Kitchen fittings & BIC	9
	Electrical fittings	16
	Label and scale	2
NORTH EAST ELEVATION		
	Door and windows	22
	External walls, roof, rainwater goods	20
	Labels	3
	Sub-total	82
	Sub-total / 2 ()	41
SECTIONAL ELEVATION		
	Walls	7
	Foundation	7
	Roof	12
	Window and door	6
	Labels (6 / 2)	3
	Hatching	14
	Sub-total ()	49
	TOTAL (+)	90

NAME	
NAAM	