

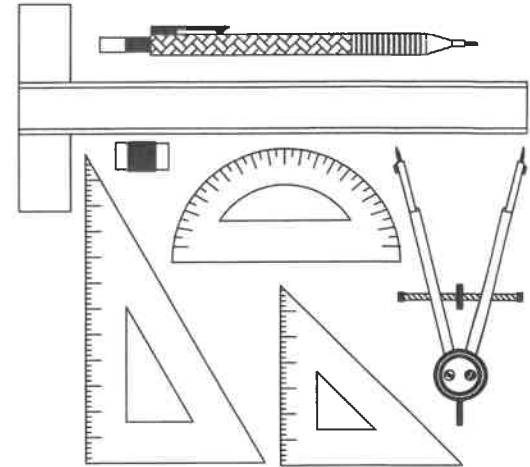


MARKING GUIDELINES

NATIONAL SENIOR CERTIFICATE EXAMINATION
MAY 2025

ENGINEERING GRAPHICS AND DESIGN
PAPER 1

MARKS: 200
TIME: 3 HOURS



| FOR OFFICIAL USE ONLY | | | | | |
|-----------------------|-----------------------|------|-----------|---------|------|
| QUESTION | SECTION | MARK | MODERATED | MAXIMUM | CODE |
| 1 | CIVIL ANALYTICAL | | | 20 | |
| 2 | SOLID GEOMETRY | | | 40 | |
| 3 | TWO-POINT PERSPECTIVE | | | 40 | |
| 4 | CIVIL DRAWING | | | 100 | |
| | TOTAL | | | 200 | |

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This question paper consists of **5 pages** including the cover page and **4 marking guidelines**.
2. **All** questions must be answered.
3. Unless specified otherwise, all questions are in **First-Angle Orthographic Projection**.
4. Unless specified otherwise, all questions are to be completed to a **scale of 1:1**.
5. **All answer sheets** must be restapled in numerical order, even questions that have not been answered.
6. All **construction work** must be shown.
7. Print your **examination number** neatly on each page.
8. Use only the **answer sheets** provided.
9. Your drawings should reflect **neatness** and **accuracy**.
10. All dimensions or detail not given may be **assumed** in **good proportion**.
11. Your drawings should comply with SANS 10143.
12. All measurements are in millimetres (mm) unless otherwise indicated.

PLEASE PASTE THE BARCODED LABEL HERE

CHECKED BY

EXAMINATION NUMBER

| | | | | | | | | | | | | | | | | | | | |
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QUESTION 3

TWO-POINT PERSPECTIVE

The figures show the three views of a dwelling. Draw a neat two-point perspective drawing of the dwelling.

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

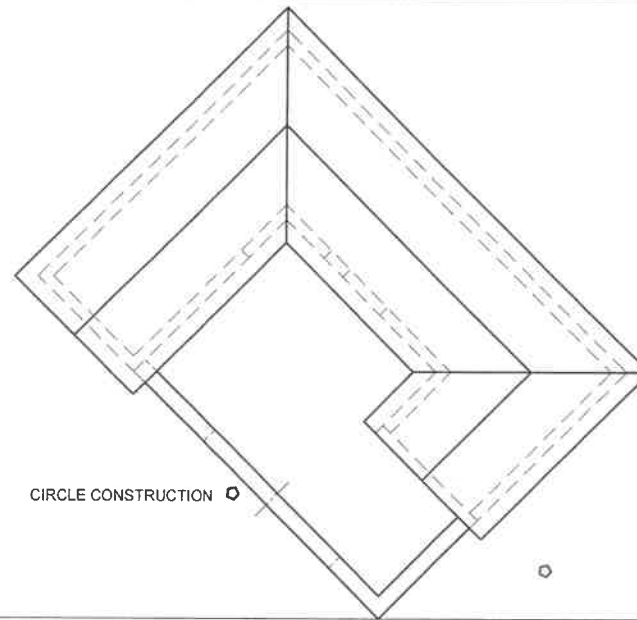
Determine and label the vanishing points RVP and LVP.

NO HIDDEN DETAIL IS REQUIRED.

ASSESSMENT CRITERIA

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

- determine and label the vanishing points 2
- draw the two-point perspective view 38



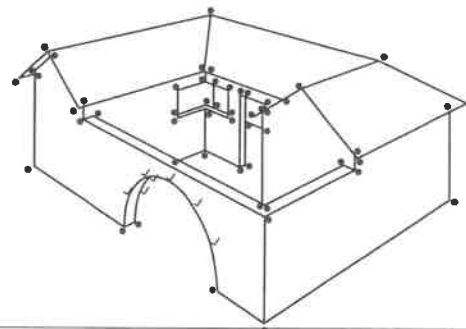
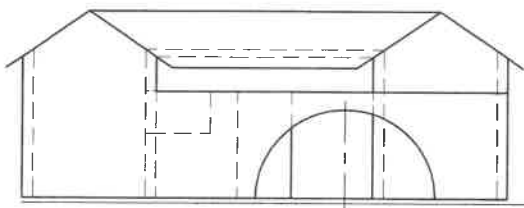
CIRCLE CONSTRUCTION

PP

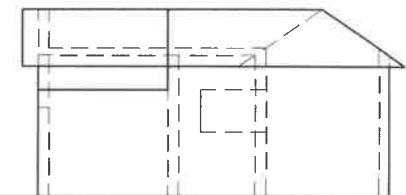
LVP

RVP

HL



SP



GL

| | | |
|-----|------|---|
| PTS | 52/2 | • |
| | 26 | |
| Con | 5 | ◊ |
| Arc | 7 | ✓ |
| VPS | 2 | • |

40 MARKS

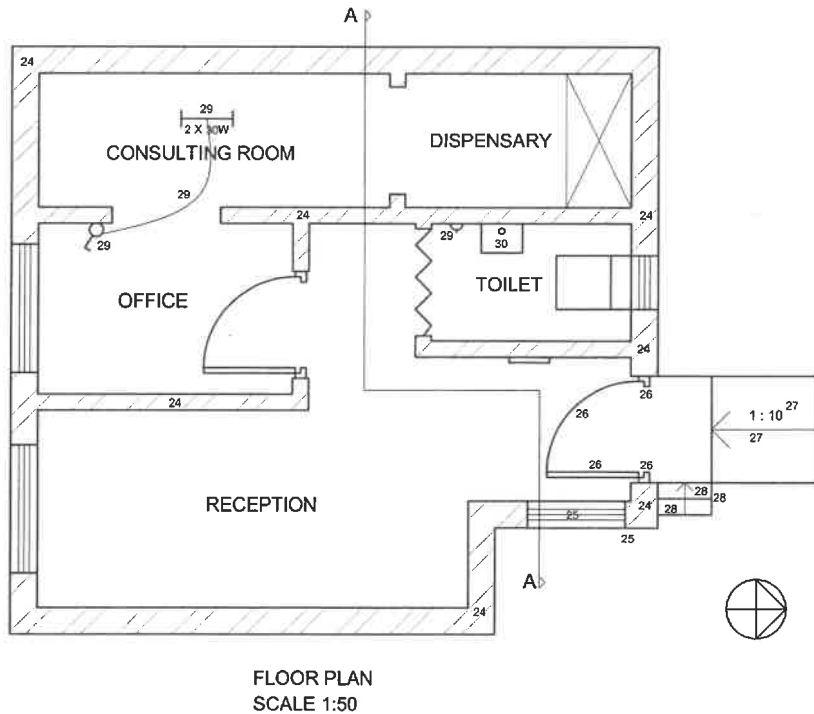
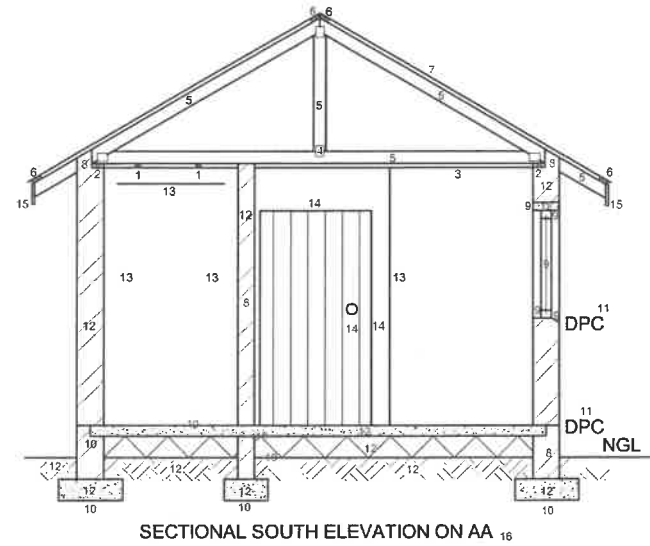
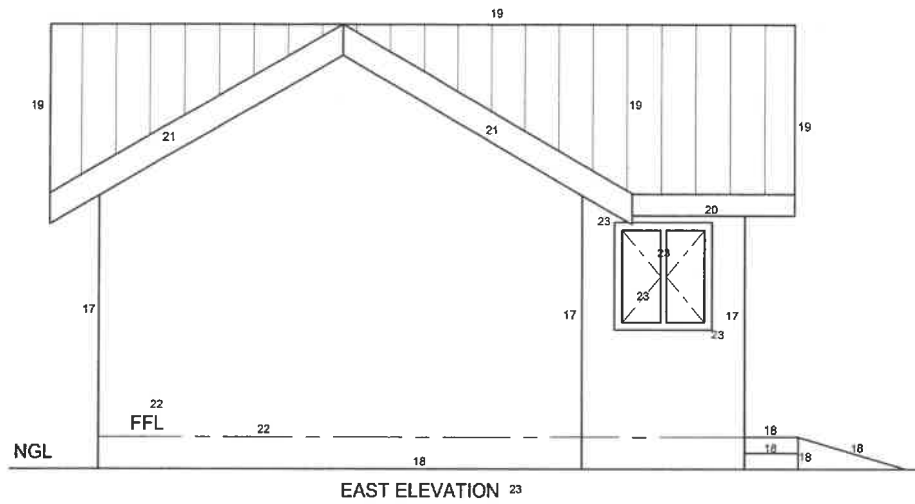
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ANSWER SHEET 3

QUESTION 4

CIVIL
DRAWING



Assessment Criteria

Sectional Elevation

| | |
|------------------------|----|
| 1 Ceiling Battens | 2 |
| 2 Wall Plates | 2 |
| 3 Ceiling Board | 1 |
| 4 Truss Plate | 1 |
| 5 Roof Truss | 5 |
| 6 Purlins | 4 |
| 7 Roof | 1 |
| 8 Sectioned Walls | 4 |
| 9 Sectioned Window | 5 |
| 10 Floor & Foundation | 7 |
| 11 DPC & NGL Labels | 3 |
| 12 Hatching | 12 |
| 13 Internal Wall & BIC | 2 |
| 14 Folding Door | 3 |
| 15 Fascia Boards | 2 |
| 16 Label | 1 |

| | |
|-----------------|-----------|
| Subtotal | 55 |
|-----------------|-----------|

East Elevation

| | |
|----------------------|---|
| 17 Walls | 3 |
| 18 NGL, Steps & Ramp | 5 |
| 19 Roof | 4 |
| 20 Fascia Board | 1 |
| 21 Barge Boards | 2 |
| 22 FFL | 2 |
| 23 Label + Window | 5 |

| | |
|-----------------|-----------|
| Subtotal | 22 |
|-----------------|-----------|

Floor Plan

| | |
|---------------------|---|
| 24 Hatching | 7 |
| 25 Window | 2 |
| 26 Door | 4 |
| 27 Ramp | 2 |
| 28 Steps | 3 |
| 29 Electrical | 4 |
| 30 Plumbing Fixture | 1 |

| | |
|-----------------|-----------|
| Subtotal | 23 |
|-----------------|-----------|

| | |
|--------------|------------|
| TOTAL | 100 |
|--------------|------------|

EXAMINATION NUMBER

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