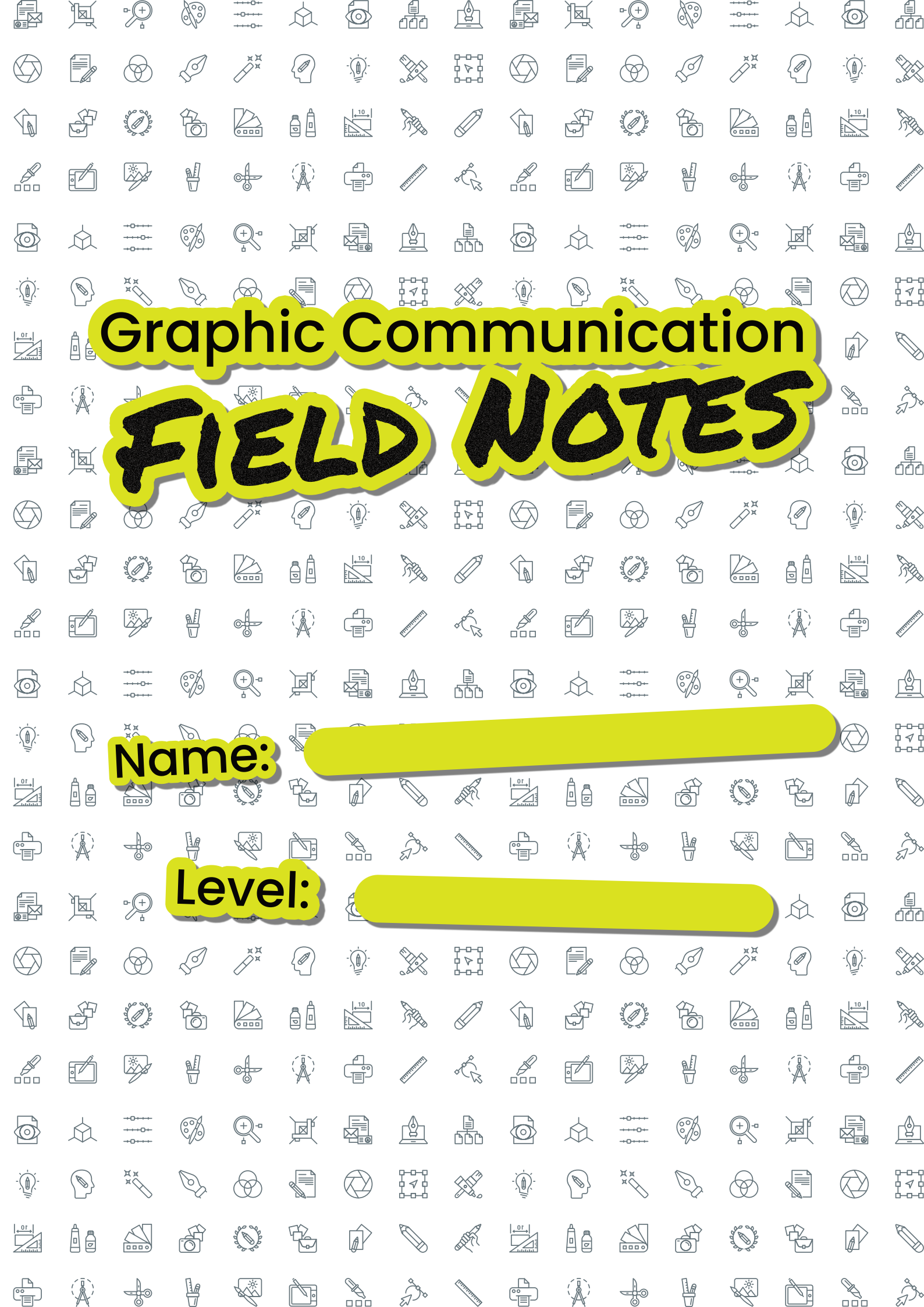




Graphic Communication **FIELD NOTES**

Name: 

Level: 

Welcome

Introduction

This is your Graphic Communication field-notes.

Use this booklet to take notes during lessons and it will help you when it comes to revision for exams.

Common graphic file types

JPG	Raster. No transparency
PNG	Raster. With transparency
BMP	Raster. No transparency
GIF	Raster. With transparency
TIFF	Raster. With transparency
DXF	Vector for manufacture
SVG	Vector for logos & manuf.
PDF	Professional doc sharing
STEP	Sharing 3D CAD models

Common graphic file types

OBJ	Sharing 3D mesh files
3DS	Sharing 3D mesh files
STL	Mesh for CNC/3D printing
3DF	3D print model & properties
gCode	3D printer print file
IPT	Inventor component
IAM	Inventor assembly
IDW	Inventor drawing
IPN	Inventor presentation

Inventor Shortcuts & Keys

F7	Section a model in a sketch
Alt-Drag	Auto-constrain
L	Line
C	Circle
R	Rectangle
D	Dimension
T	Trim
F6	Home view
G	Ground component

Blender Shortcuts & Keys

TAB	Swap between Mesh & Solid
G	Grab an item to move it.
Alt-G	Centre items to origin
Alt-R	Remove any rotations
N	Open the Sidebar menu
Shift-D	Duplicate an item
Ctrl-A	Apply transformations
A	Select everything
Ctrl-Shift-T	Principle Texture Nodes

Useful Websites

www.autodesk.com/education
www.blender.org
www.onshape.com/en/education/
www.designclass.co.uk

Useful Websites

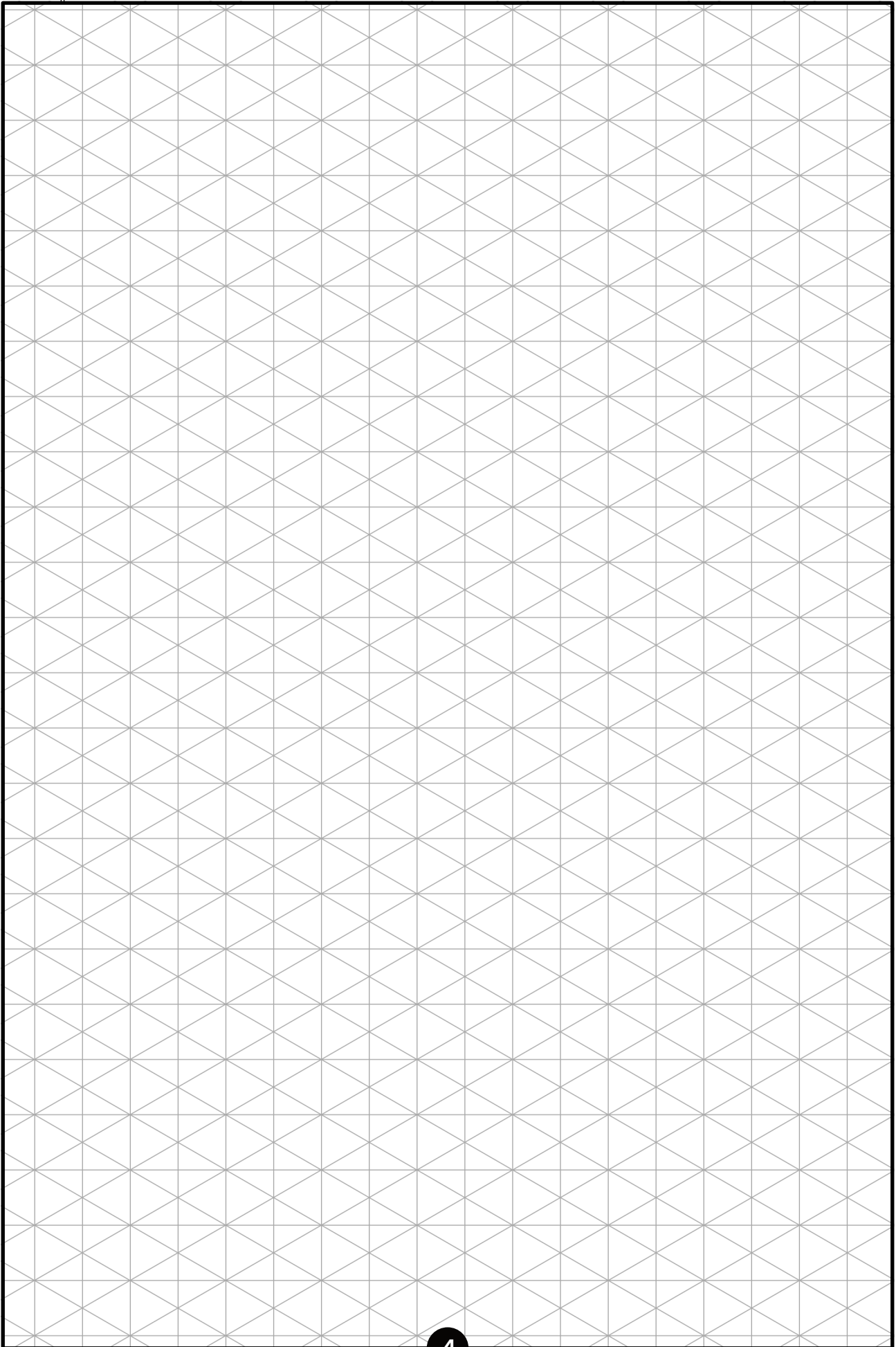
www.affinity.studio/
<https://color.adobe.com/>
www.pexels.com
<https://fonts.google.com/>

Topic

Date:

Topic:

Date:

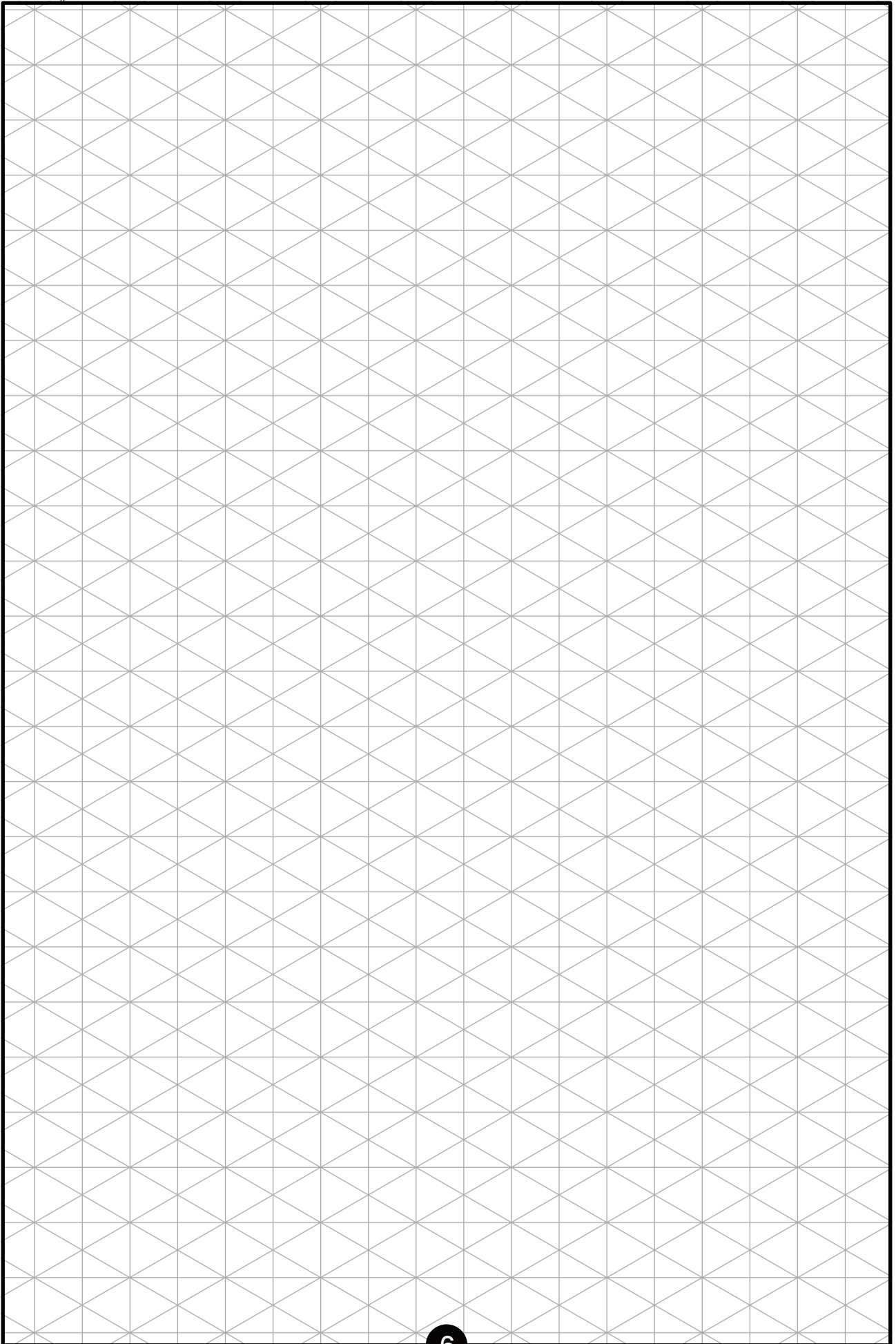


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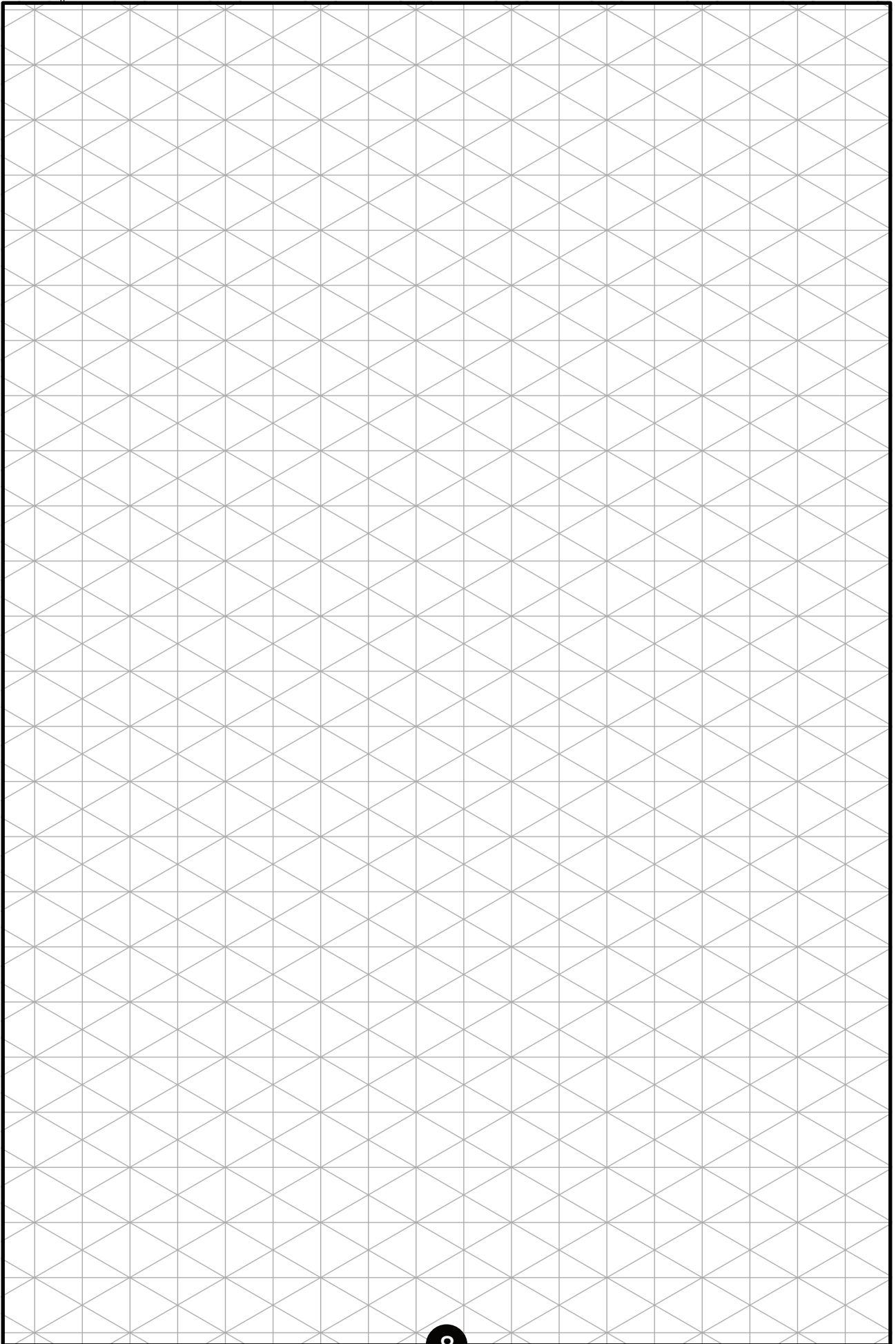


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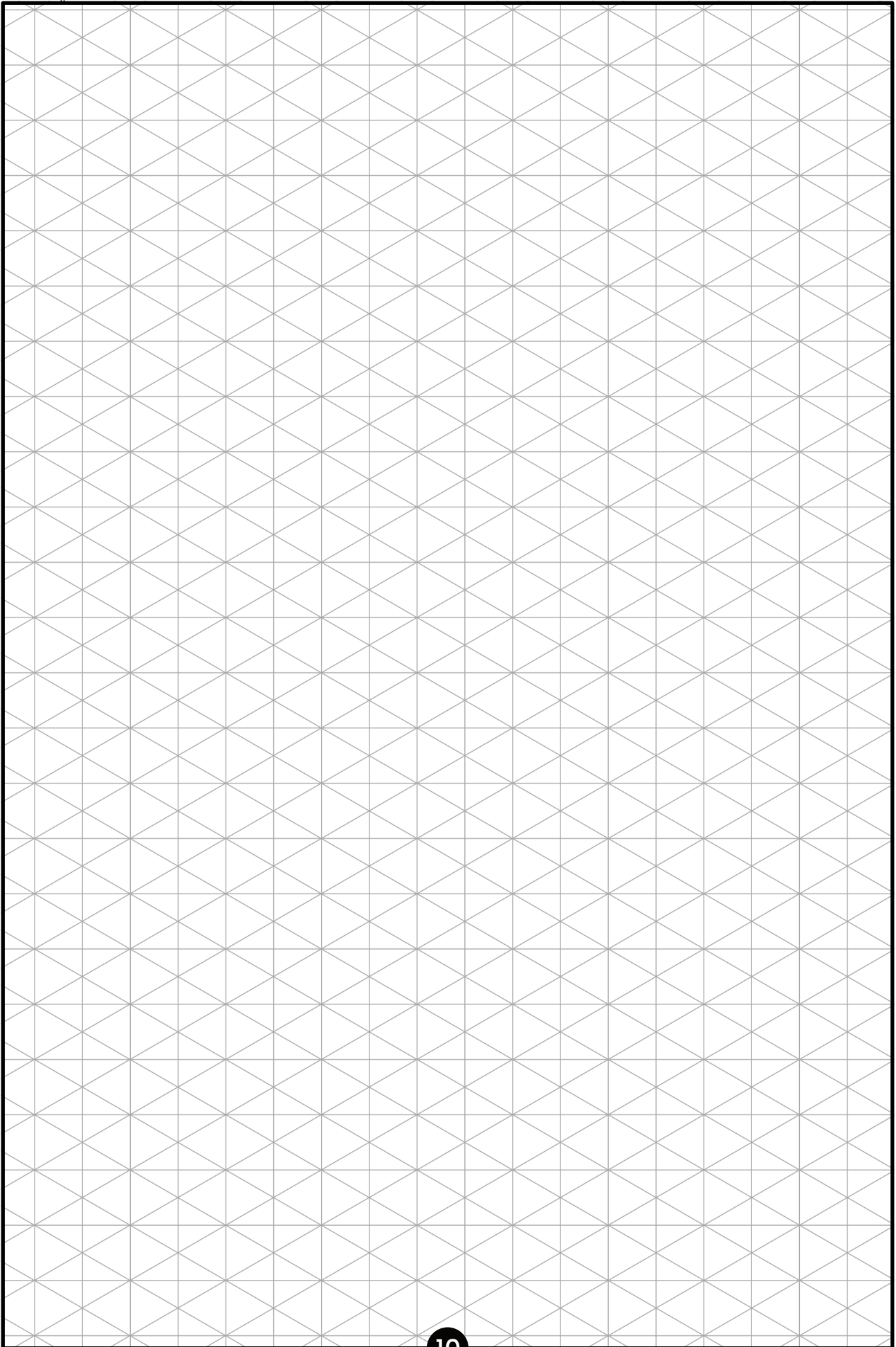


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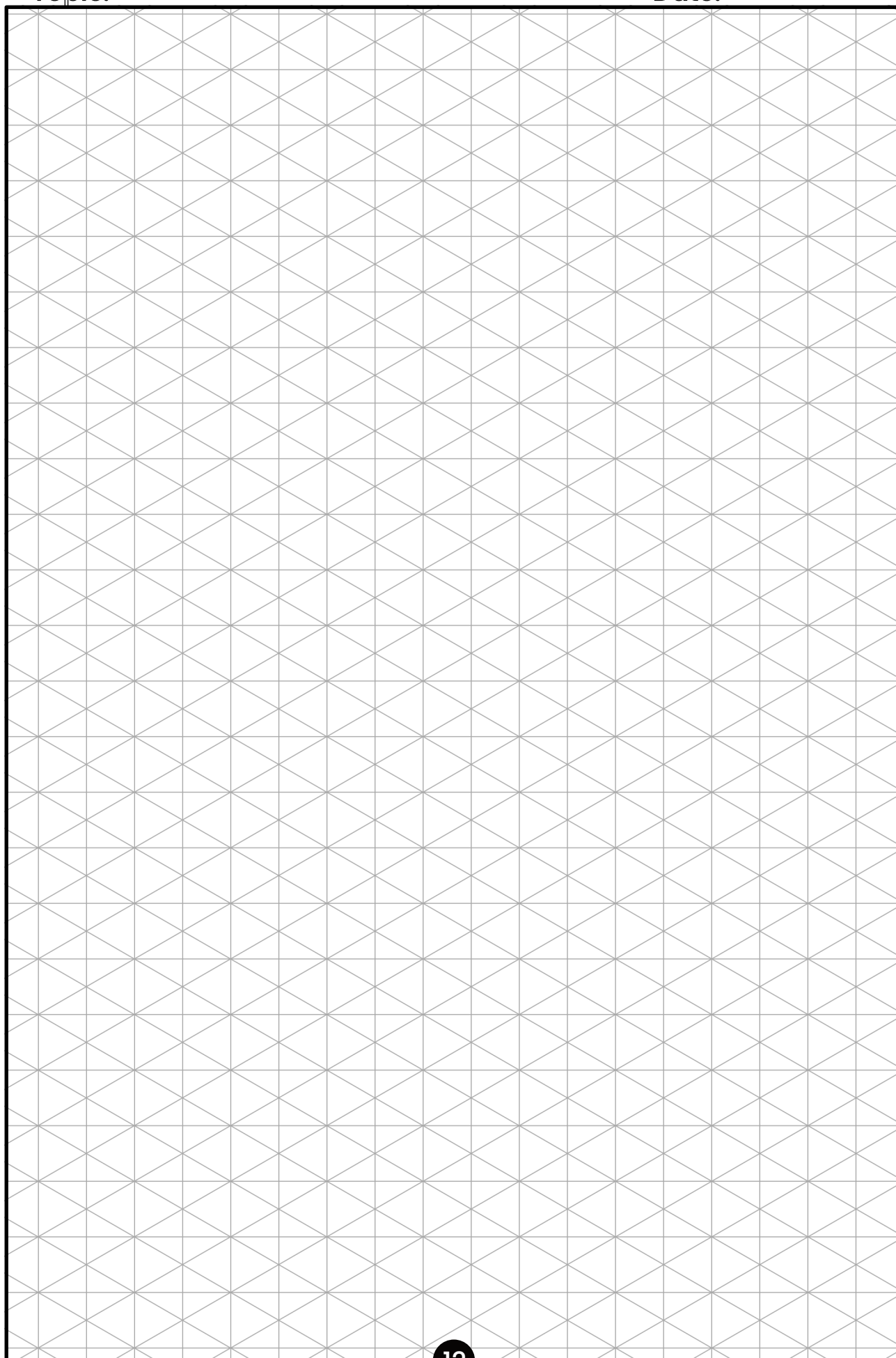


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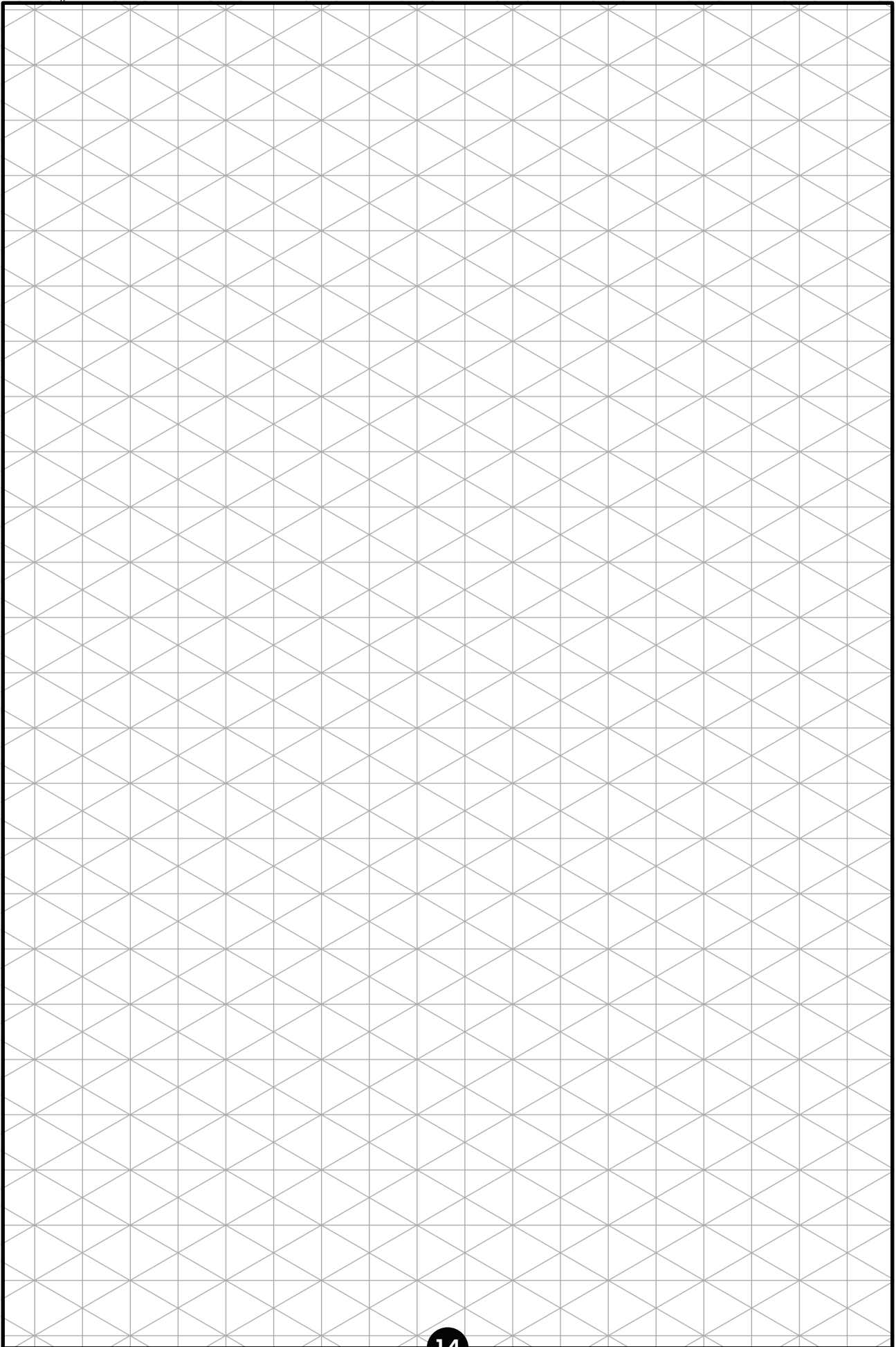


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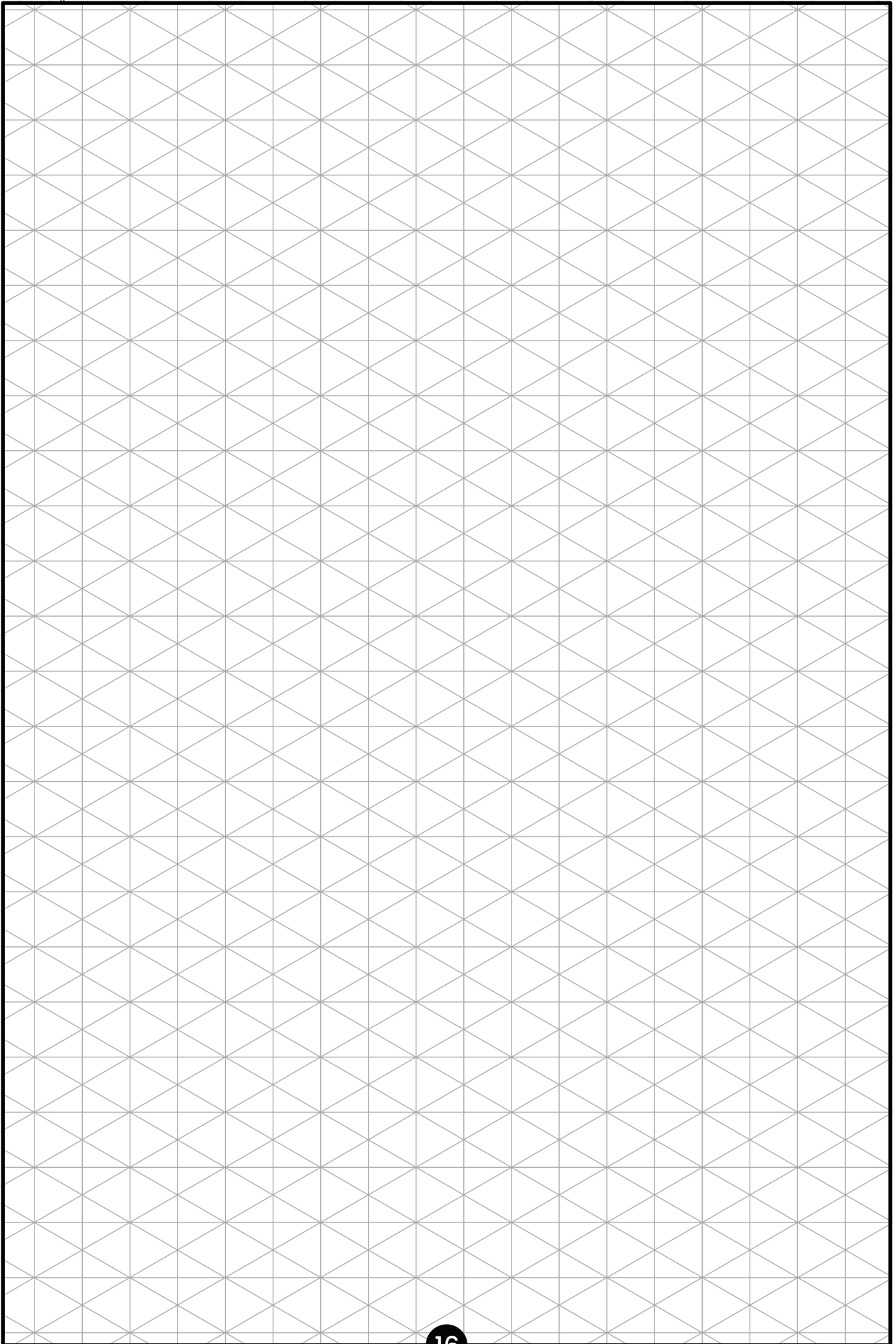
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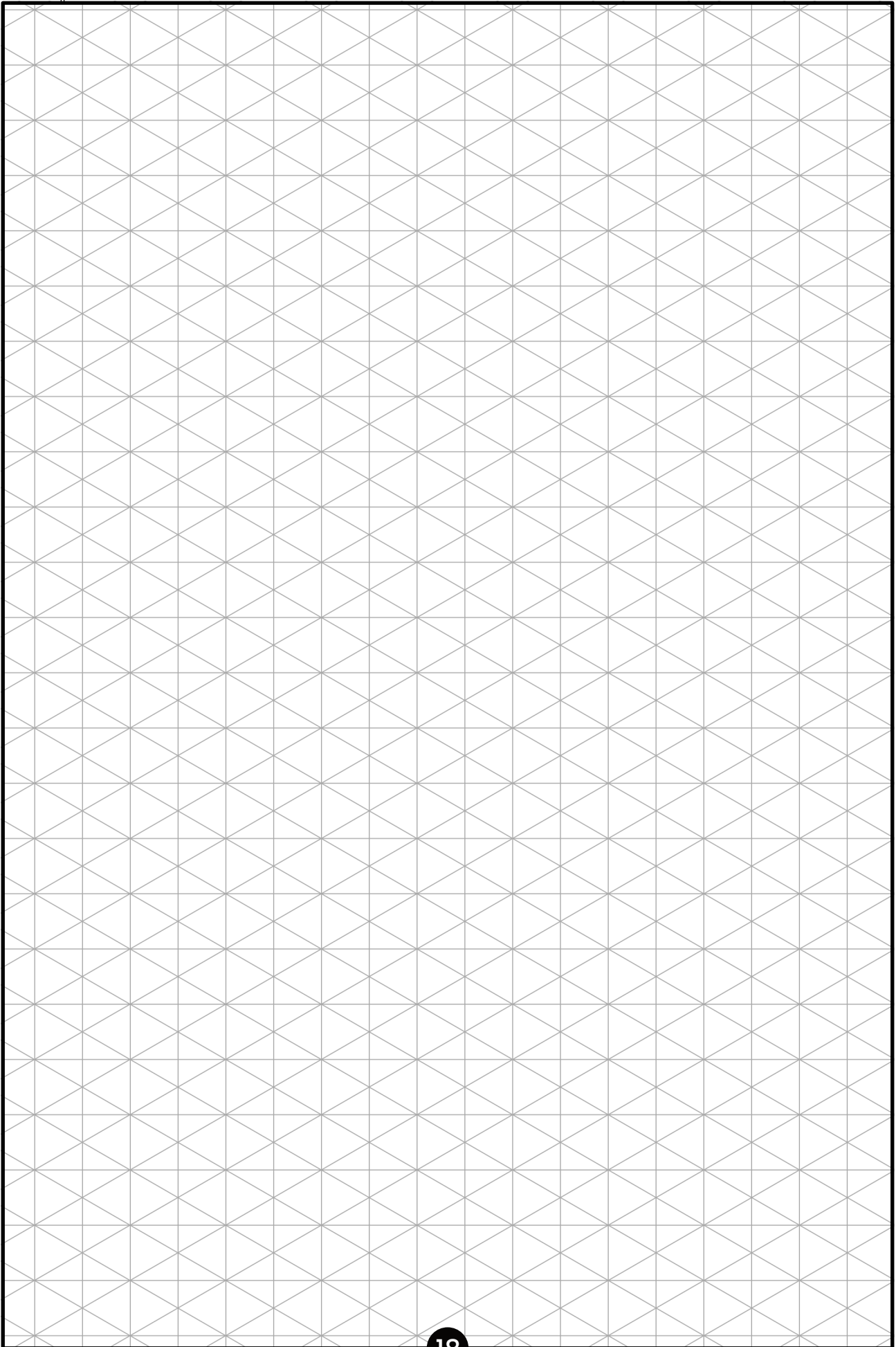


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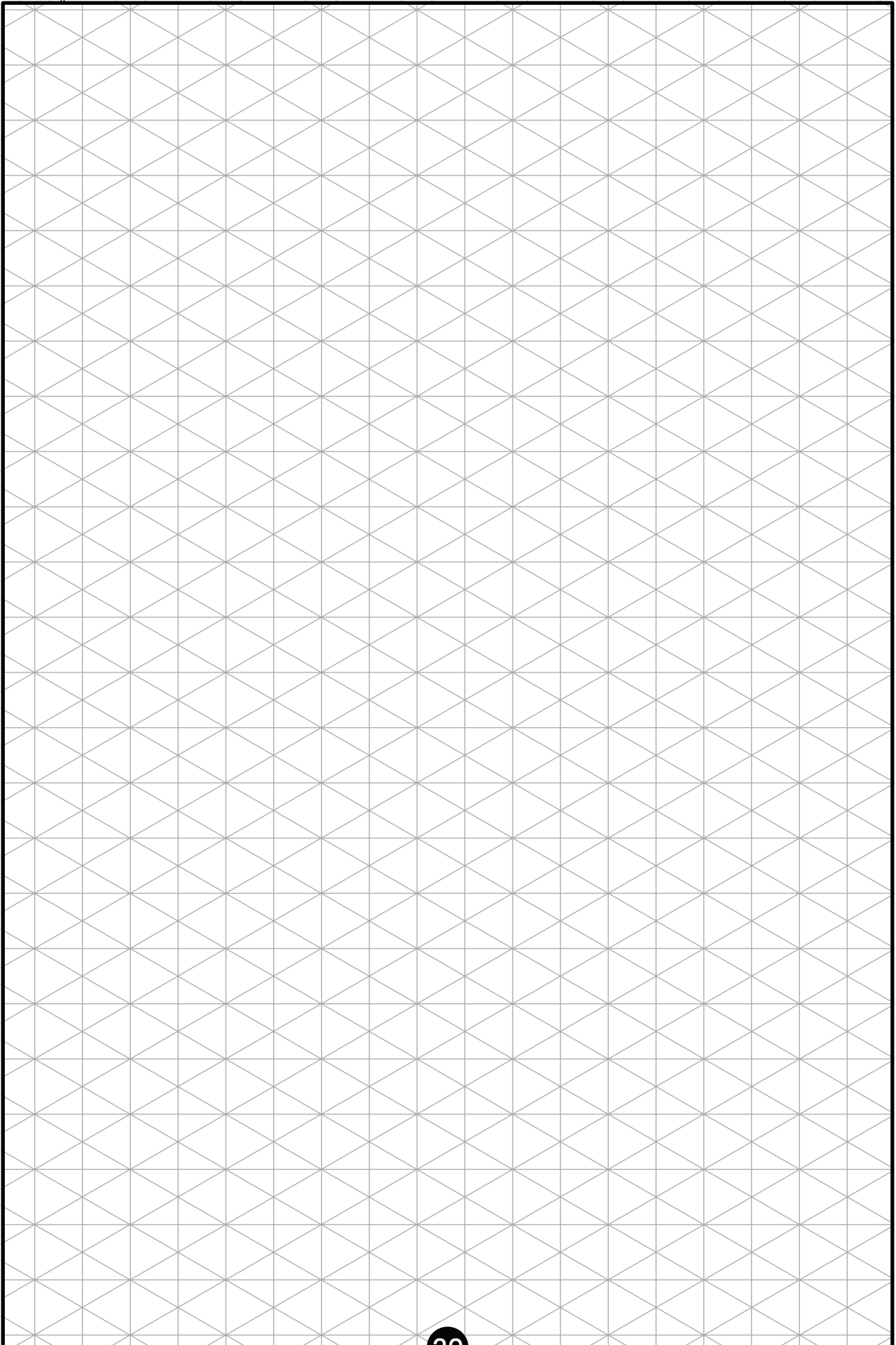
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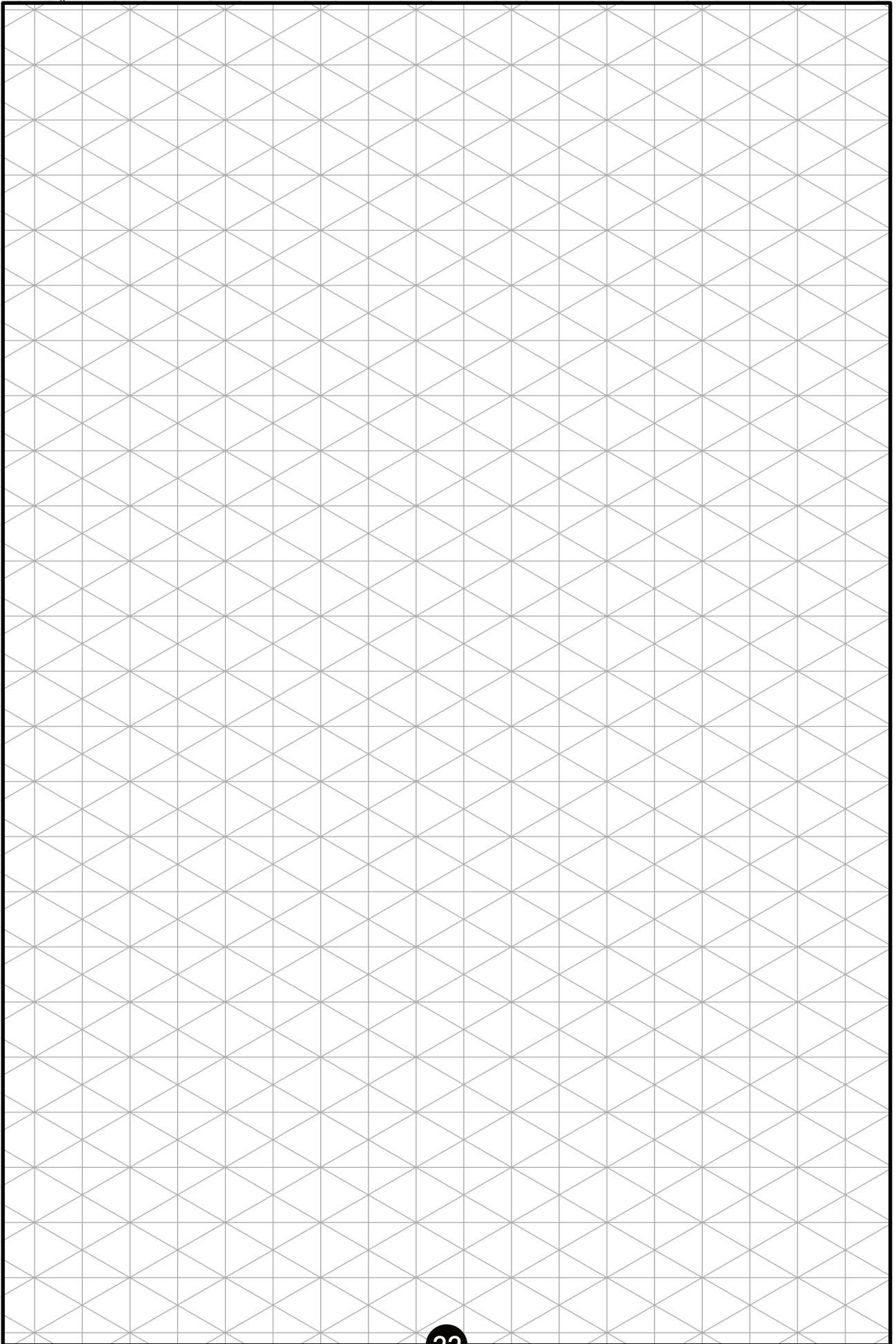


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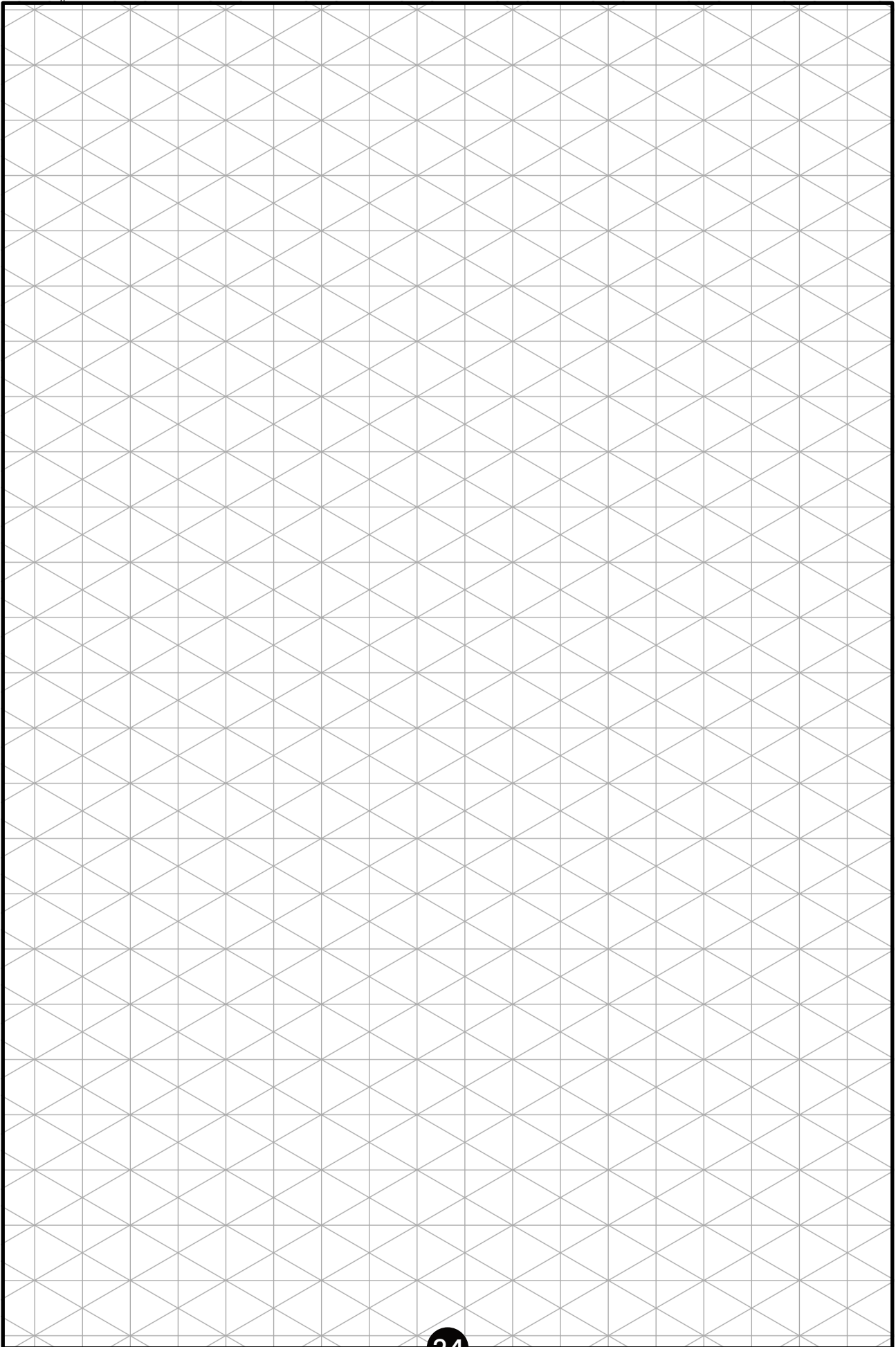


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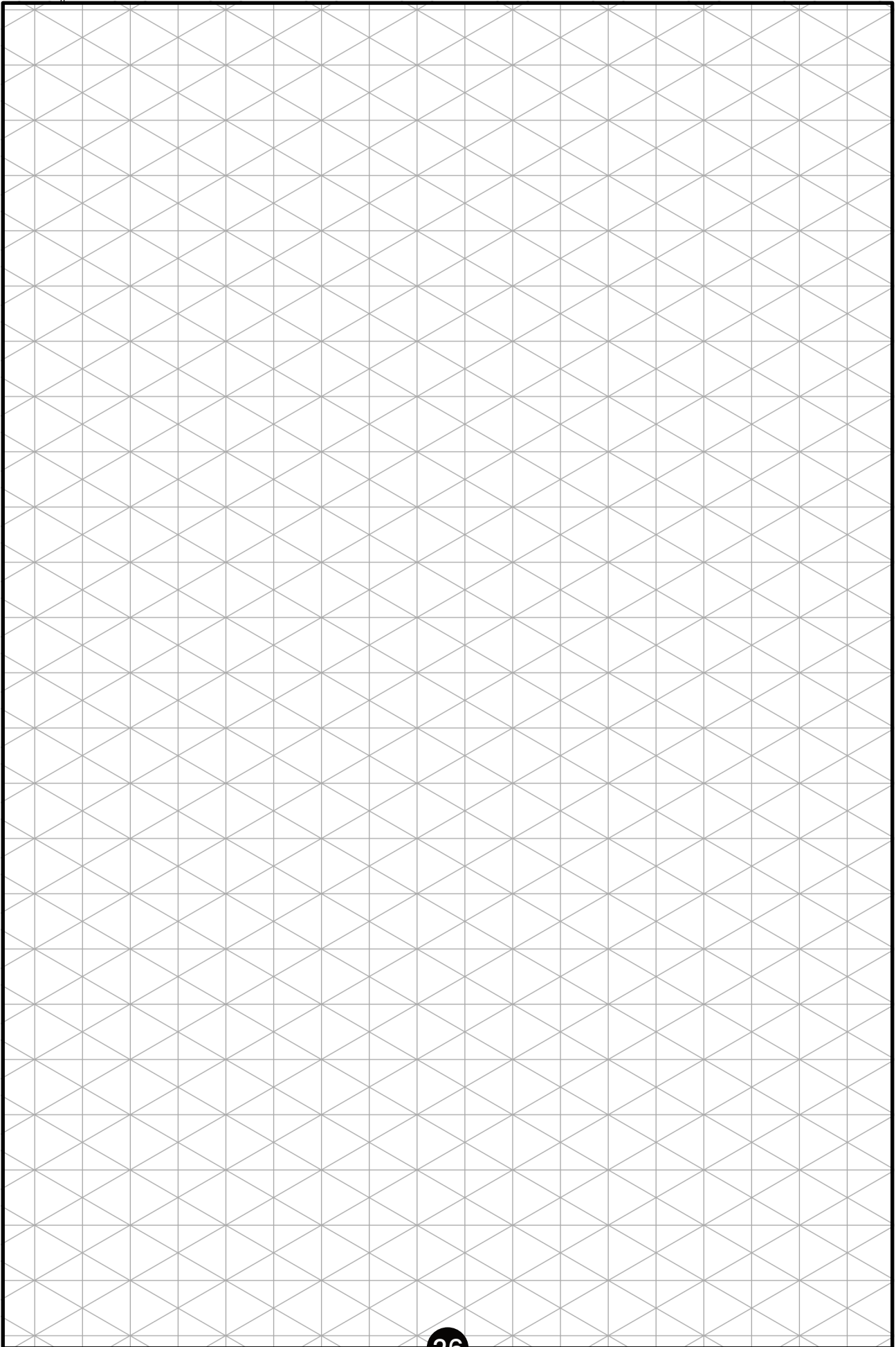
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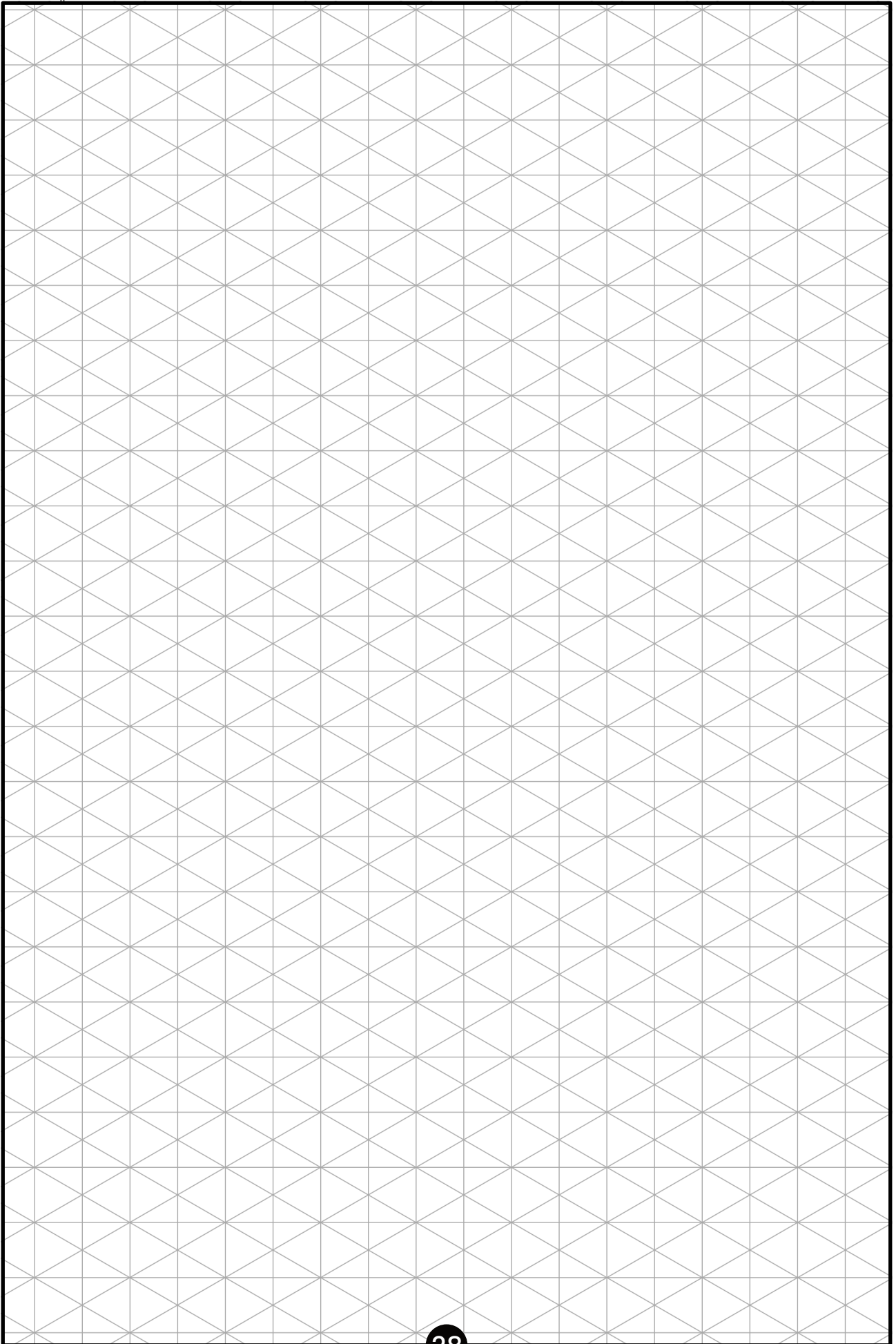


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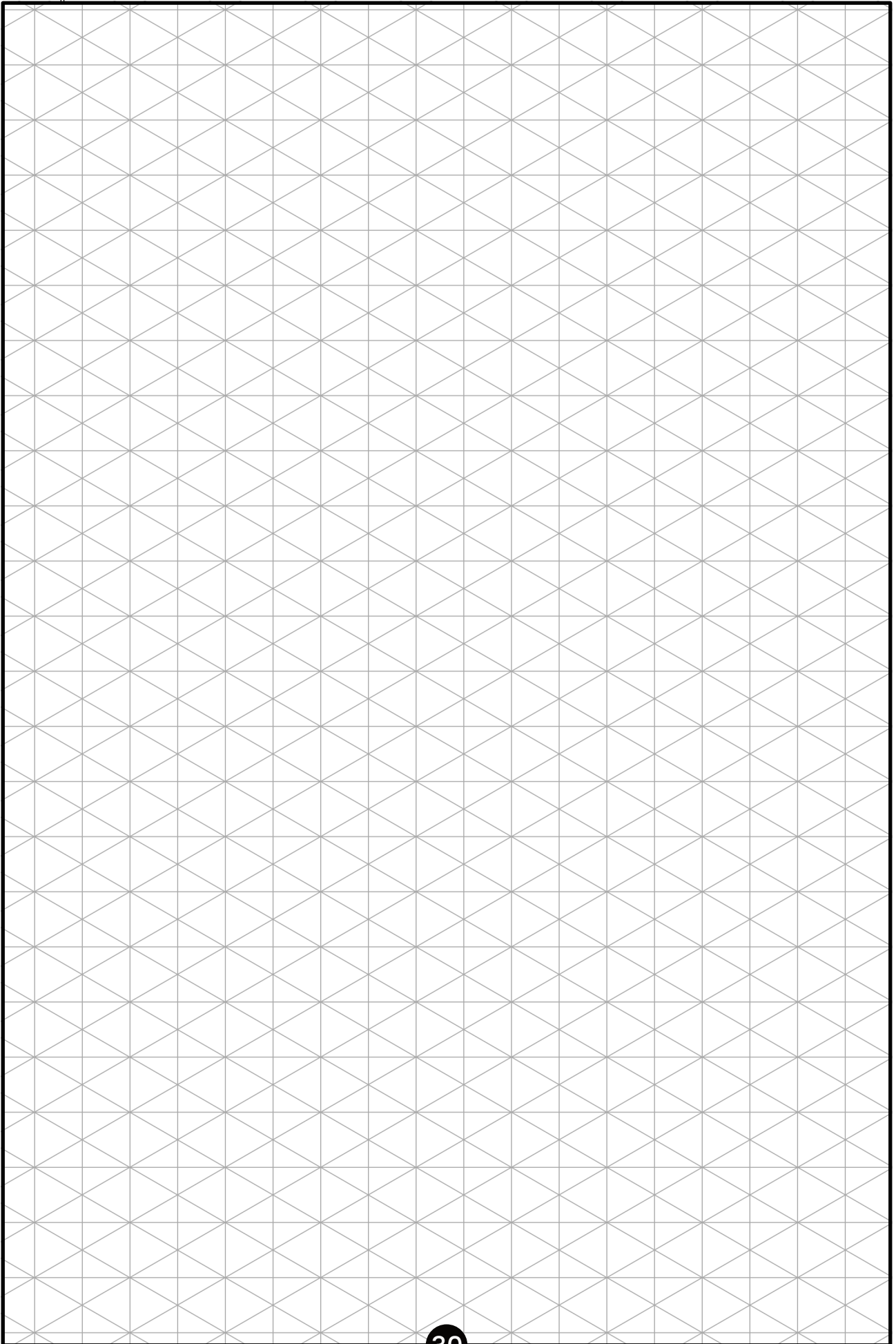
Topic:

Date:



Topic:

Date:



Topic:

Date: _____

Topic:

Date:

Topic:

Date: _____

Learning Checklist

Graphic Types

Preliminary Graphics..... ☐

Production Graphics..... ☐

Promotional Graphics..... ☐

Computer Aided Design

File Management..... ☐

Hardware Devices..... ☐

Top-Down Modelling..... ☐

Bottom-Up Modelling..... ☐

Extrude Command..... ☐

Revolve Command..... ☐

Loft Command..... ☐

Helice Command..... ☐

Extrude-along-a-path Command..... ☐

Shell Edit..... ☐

Regular Chamfer Edit..... ☐

Regular Fillet Edit..... ☐

Irregular Chamfer Edit..... ☐

Irregular Fillet Edit..... ☐

Linear Array..... ☐

Radial Array..... ☐

Box Array..... ☐

Add (Boolean)..... ☐

Subtract (Boolean)..... ☐

Intersect (Boolean)..... ☐

Mirror..... ☐

Project Edge..... ☐

Extend..... ☐

Offset Profile..... ☐

Trim..... ☐

Modelling Tree..... ☐

Computer Aided Design

CAD Library..... ☐

DXF files..... ☐

STEP/IGES files..... ☐

3DS files..... ☐

Mate assembly constraint..... ☐

Centre axis assembly constraint..... ☐

Align assembly constraint..... ☐

Orientate assembly constraint..... ☐

Offset assembly constraint..... ☐

Tangent assembly constraint..... ☐

Assemblies..... ☐

Components..... ☐

Sub-assembly..... ☐

Using technology in graphics

Remote working..... ☐

Cloud computing..... ☐

Cloud storage..... ☐

Digital Rights Management..... ☐

Drawings standards & conventions

3rd angle projection system..... ☐

Centre lines..... ☐

Cutting planes..... ☐

Fold lines..... ☐

Hidden detail..... ☐

Chain dimensions..... ☐

Parallel dimensions..... ☐

Running dimensions..... ☐

Angular dimensions..... ☐

Diameters..... ☐

Radii..... ☐

Learning Checklist

Drawings standards & conventions

- Symmetrical tolerances..... ☐
- Asymmetrical tolerances..... ☐
- Sections - Linear..... ☐
- Sections - Stepped..... ☐
- Sections - Revolved..... ☐
- Sections - Partial..... ☐
- Sections - Crosshatching rules..... ☐
- Exploded views..... ☐
- Location plan scales..... ☐
- Site plan scales..... ☐
- Floor plan scales..... ☐
- Architecture symbols..... ☐

Geometric shapes and forms

- Interpenetration..... ☐
- Ellipses..... ☐
- Tangency..... ☐
- True shapes..... ☐
- True length..... ☐
- Auxiliary views..... ☐
- Surface developments..... ☐

Views & techniques

- Isometric..... ☐
- Oblique..... ☐
- Planometric..... ☐
- 1 point perspective..... ☐
- 2 point perspective..... ☐
- Orthographic..... ☐
- Manual vs. digital..... ☐
- Drawing board..... ☐
- Spatial awareness..... ☐

Illustration & rendering

- Benefits of CAD rendering..... ☐
- Benefits of manual rendering..... ☐
- Material mapping..... ☐
- Texture mapping..... ☐
- Sited environment..... ☐
- Decals..... ☐
- UV mapping..... ☐
- Camera settings..... ☐
- Pixels-per-inch..... ☐
- Dots-per-inch..... ☐
- Samples..... ☐
- Ray tracing..... ☐
- Reflections, light & shadow..... ☐

Design principles

- Alignment..... ☐
- Contrast & harmony..... ☐
- Dominance..... ☐
- Rhythm..... ☐
- Unity..... ☐
- Balance (symmetric)..... ☐
- Balance (asymmetric)..... ☐
- Mass..... ☐
- Depth..... ☐
- Emphasis..... ☐
- Advancing colour..... ☐
- Receding colour..... ☐
- Tints, shade & value..... ☐
- CMYK & RGB systems..... ☐
- Colour wheels..... ☐
- Accent colour..... ☐

Learning Checklist

Design elements

- Line..... ☐
- Shape..... ☐
- Serif typefaces..... ☐
- Sans-serif typefaces..... ☐
- Script typefaces..... ☐
- Colour fills..... ☐
- Gradated fills..... ☐
- Colour transitions..... ☐
- Texture..... ☐
- Photographs..... ☐
- Vectors..... ☐
- Body text..... ☐
- Title text..... ☐
- Folio..... ☐
- Caption..... ☐
- Pull quote..... ☐
- White space..... ☐
- Headers & footers..... ☐
- Running headline..... ☐

DTP tools and techniques

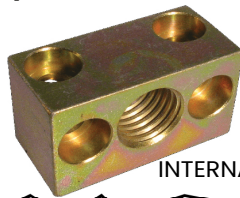
- Bleed..... ☐
- Crop marks..... ☐
- Registration marks..... ☐
- Margins..... ☐
- Page sizing..... ☐
- Master page..... ☐
- Layers..... ☐
- Grid..... ☐
- Snap-to-grid..... ☐
- Lorem ipsum..... ☐

- Reverse..... ☐
- Text wrap..... ☐
- Flow-text-along-a-path..... ☐
- Cropping (square)..... ☐
- Cropping (irregular)..... ☐
- Drop caps..... ☐
- Hanging indent..... ☐
- Columns..... ☐
- Gutter..... ☐
- Justification..... ☐
- Line spacing / leading..... ☐
- Drop shadow..... ☐
- Transparency..... ☐
- Colour picker..... ☐
- Handles..... ☐
- Rotate..... ☐
- Distribute..... ☐
- Stock images..... ☐
- Exporting..... ☐
- Print to scale..... ☐
- TIFF (raster file)..... ☐
- GIF (raster file)..... ☐
- PNG (raster file)..... ☐
- JPG (raster file)..... ☐
- BMP (raster file)..... ☐
- SVG (vector file)..... ☐

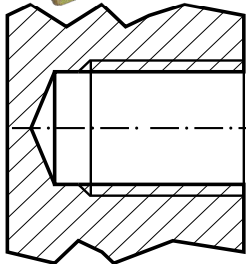
Graphics & society

- Paperless office..... ☐
- Recycled materials..... ☐
- Digital manufacture..... ☐
- International working..... ☐

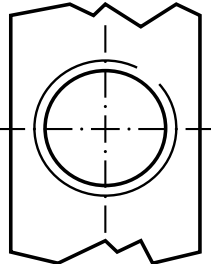
Symbols & Conventions



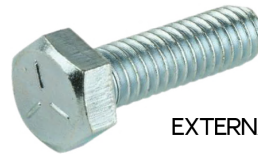
INTERNAL THREAD



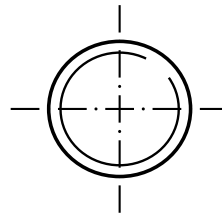
SECTIONAL END ELEVATION



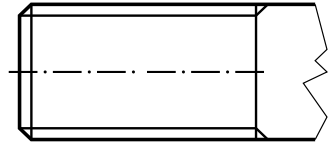
ELEVATION



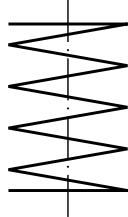
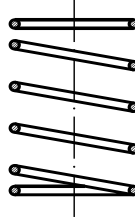
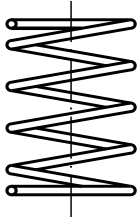
EXTERNAL THREAD



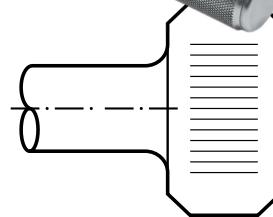
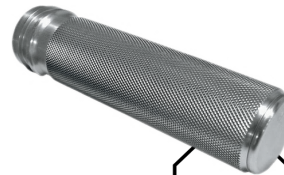
END ELEVATION



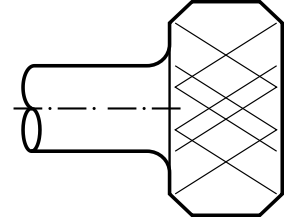
ELEVATION



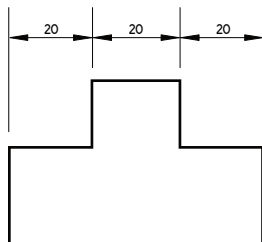
SPRINGS



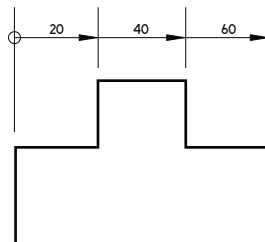
STRAIGHT KNURLING



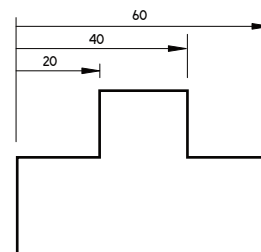
DIAMOND KNURLING



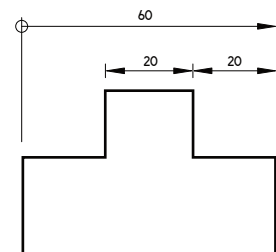
CHAIN DIMENSIONS



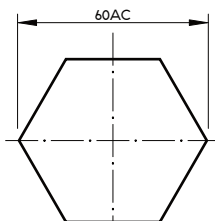
RUNNING DIMENSIONS



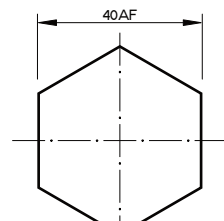
PARALLEL DIMENSIONS



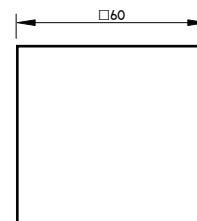
COMBINED DIMENSIONS



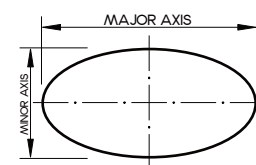
HEXAGONS ACROSS CORNERS



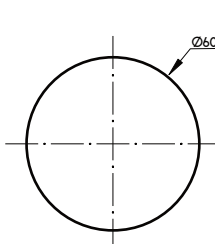
HEXAGONS ACROSS FLATS



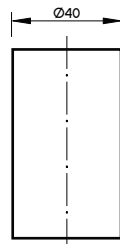
SQUARES



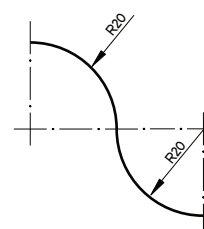
ELLIPSES



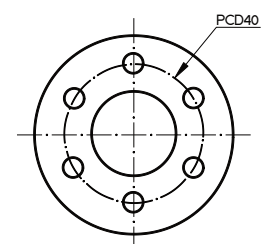
CIRCULAR DIMENSIONS



CYLINDRICAL DIMENSIONS

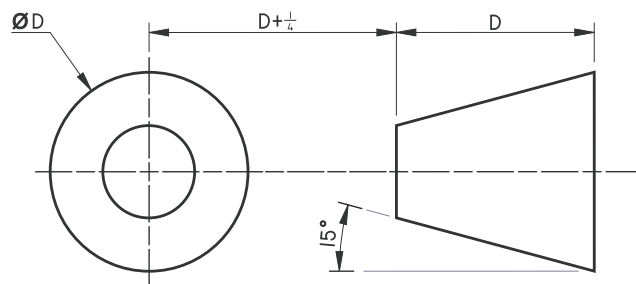
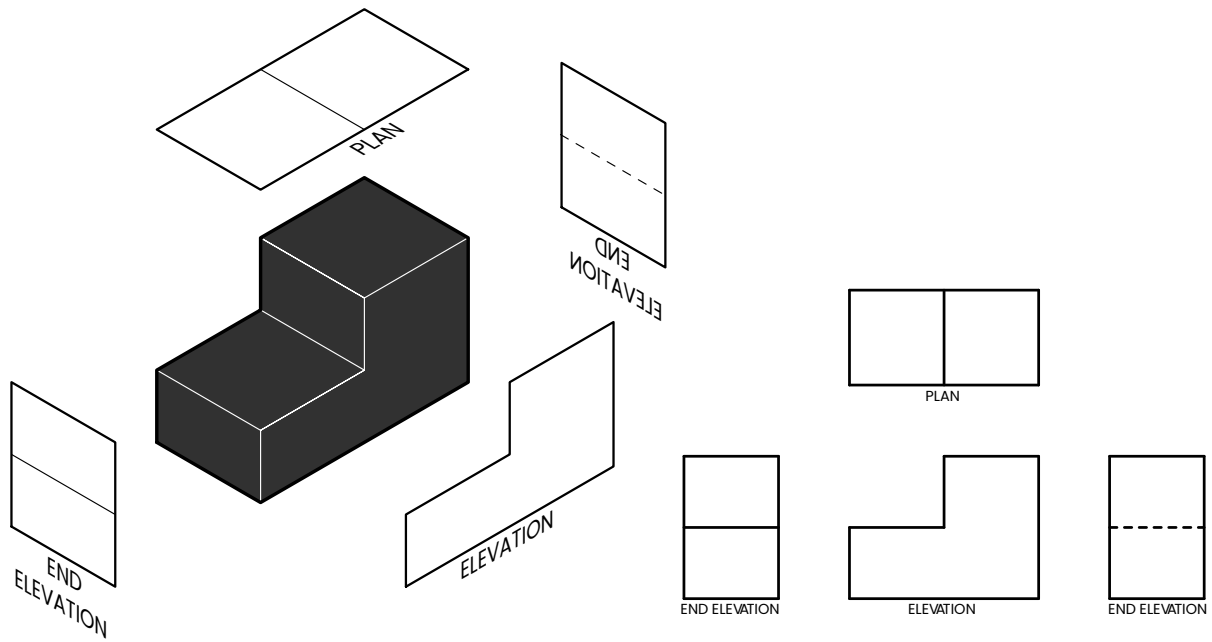


RADIAL DIMENSIONS

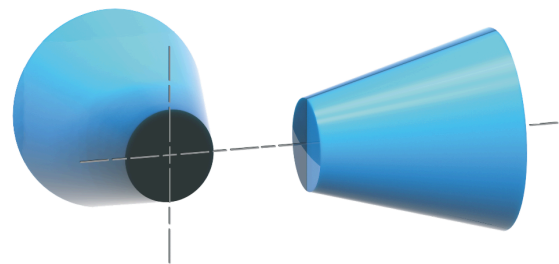


PITCH CIRCLE DIAMETER

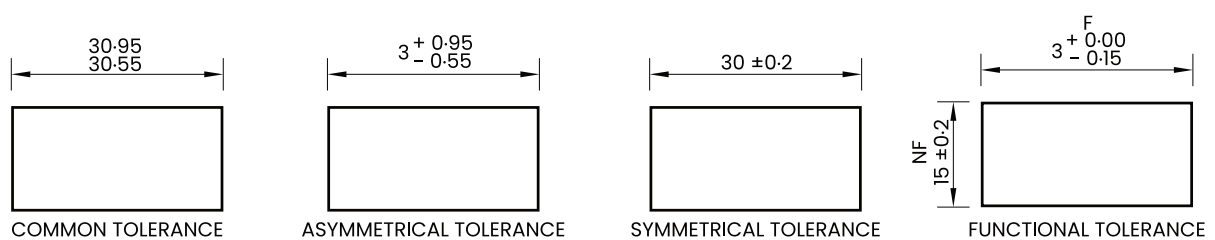
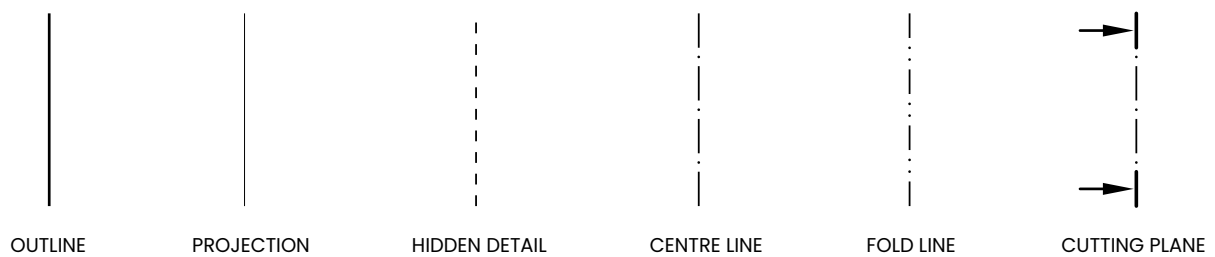
Symbols & Conventions



3rd ANGLE PROJECTION SYMBOL



3rd ANGLE PROJECTION SYMBOL MEANING



Symbols & Conventions



LAMP



SWITCH



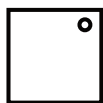
SOCKET



RADIATOR



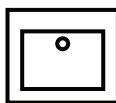
HEATED TOWEL RAIL



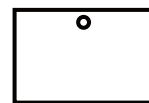
SHOWER TRAY



BATH



WASH BASIN



SINK



W/C



SINKTOP



DOOR



WOOD SAWN



INSULTATION BOARD



BLOCKWORK



CONCRETE



BRICKWORK



EXISTING TREE



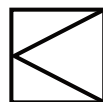
EXISTING TREE TO
BE REMOVED



PROPOSED TREE



NORTH POINT



WINDOW
HINGED AT SIDE



WINDOW
HINGED AT TOP



WINDOW
HINGED AT BOTTOM



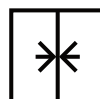
FIXED WINDOW



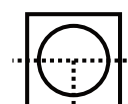
WINDOW
PIVOTED HORIZONTAL



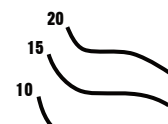
CENTRE LINE



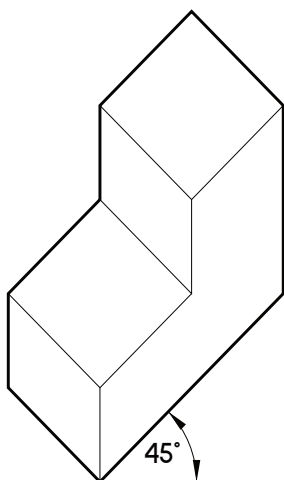
WINDOW
SLIDING HORIZONTALLY



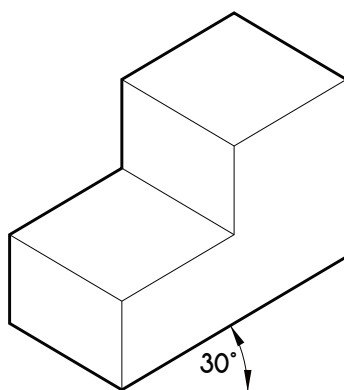
DRAINAGE



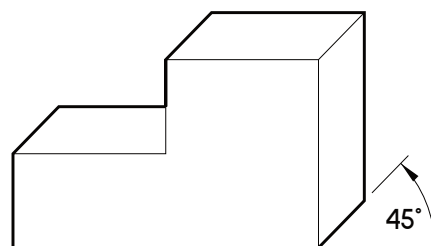
CONTOURS



PLANOMETRIC



ISOMETRIC



OBLIQUE

