

03

SEATING ARRANGEMENTS · LECTURE 03 OF 05

Circular & Square Seating — Round and Cornered

Round table grammar · Clockwise vs anti-clockwise · Square tables

CIRCULAR & SQUARE SEATING — ROUND AND CORNERED

AGENDA · 75 MIN

What we will cover today

- 01** **The grammar of seating**
Direction conventions and row notation
- 02** **Left-right inversion**
The #1 trap student fall into
- 03** **Neighbour clues, read precisely**
Immediate · second · third · between
- 04** **Fix-first method**
Start from the most certain clue
- 05** **Worked demos + 10 live examples**
Faculty solves on the right half
- 06** **Homework & next class**
Practice 01 · L2 = double row

PART 01

The Frame



Single row, facing arrow, and the grammar every seating problem must obey.

CONCEPT · THE CIRCLE

Round table grammar

- N people around a round table
Default: all face the centre of the table
- Variant: all face away from the centre
Inversion applies — left and right flip
- Mixed facing — case for L4
Today: assume single facing direction
- Seats are equally spaced
Adjacent means immediate neighbour; gap of 1 means 'second to'

MEMORISE

Always state the facing in your first line: 'All face the centre' OR 'All face away from the centre'. Without it, every clue is a guess.

CONCEPT · DIRECTION

Clockwise vs anti-clockwise

- Facing centre → my left is anti-clockwise
Trace your finger anti-clockwise on the diagram
- Facing centre → my right is clockwise
Same finger trace clockwise
- Facing away → exactly reversed
My left is clockwise; my right is anti-clockwise
- 'Immediate left' = adjacent in that direction
Skip-one rules apply same as linear

FINGER DRILL

Hold your hand at the centre, palm out, and rotate to each person. Their LEFT is the direction your palm rotates anti-clockwise.

CONCEPT · INVERSION

Facing away from centre

- Less common but high-stakes
Appears in 1 of every 3-4 CLAT circular sets
- Left becomes clockwise, right becomes anti-clockwise
EVERY nth-to-the-left clue flips with the facing
- Diagram is the same
Only the direction of left/right interpretation changes
- Mixed-facing cases — wait for L4
Today, all face one way at a time

THE TRAP

Treat 'facing away from centre' as 'facing South' applied to the circle. Everything inverts.

PART 02

II

The Method

*Fix-first. Branch only when forced.
Final-check sweep before every answer.*

CONCEPT · SQUARE TABLE

Four sides, two arrangements

- **Type A: 8 people, 2 per side**
Adjacent pairs sit on the same side; corner-people share a vertex
- **Type B: 8 people, 1 corner + 1 middle each side**
Corner-people face centre; middle-people face the opposite middle
- **Rectangular table — same rules**
Long sides have more seats; corners are the same
- **Per-side direction matters**
'Sits opposite' = across the centre, not across a side

DRAW FIRST

Sketch the square and label the 4 directions (N/E/S/W) first. Then place corners, then middles.

METHOD · ANCHOR & SWEEP

How to crack a circular set

- **Step 1. State the facing direction up front**
Underline it on the diagram — never lose this anchor
- **Step 2. Anchor the most-fixed clue**
Direct-position clues > nth-to clues > negative clues
- **Step 3. Place clockwise OR anti-clockwise consistently**
Pick a direction and walk the circle in it
- **Step 4. Apply negative clues last**
Negatives prune; they never place
- **Step 5. Final-check sweep around the circle**
Walk every clue once more — circular sets hide errors

CIRCULAR & SQUARE SEATING — ROUND AND CORNERED

TIMING

*Circular set target: 5 min for diagram + 2 min riders.
Square set: 6 min diagram, 2 min riders.
Beyond cap, restart.*

PART 03

III

Live Solving

Twelve examples.

Left = problem · Right = your canvas.

Faculty asks the riders orally.

EXAMPLE 01

8 around circle, facing centre

- ▶ Eight people A-H sit around a circular table.
- ▶ All face the centre of the table.
- ▶ A sits second to the right of B.
- ▶ C is to the immediate left of A.
- ▶ D sits opposite to B.
- ▶ E is third to the left of D.

WORKING



EXAMPLE 02

8 facing away from centre

- ▶ Eight people P-W sit around a circular table.
- ▶ All face away from the centre.
- ▶ P sits second to the left of Q.
- ▶ R is to the immediate right of P.
- ▶ S sits opposite to Q.
- ▶ T is third to the right of S.

WORKING

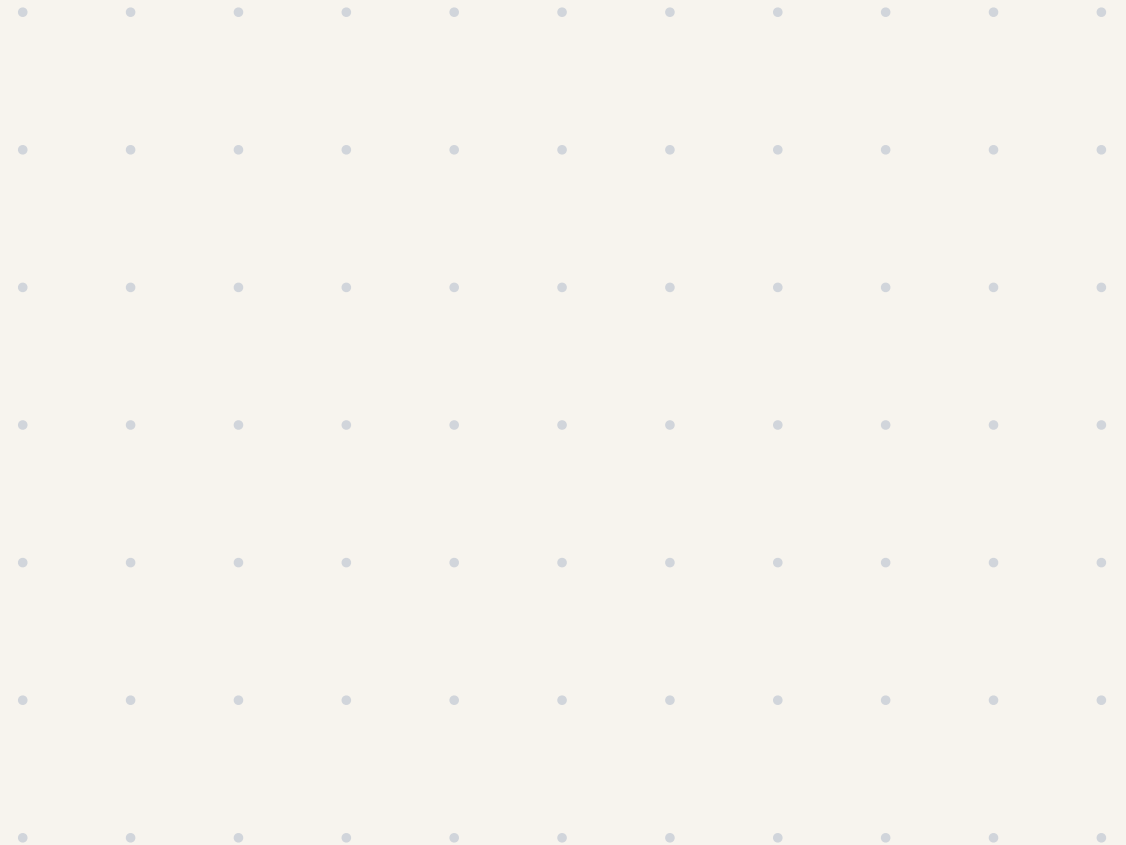


EXAMPLE 03

10 around circle — neighbours

- ▶ Ten people sit around a round table; all face the centre.
- ▶ A is third to the right of B; C is immediate left of B.
- ▶ D sits opposite to A.
- ▶ E is to D's immediate right.
- ▶ F sits between G and H; G is opposite C.
- ▶ I is second to F's left; J sits to A's left.

WORKING

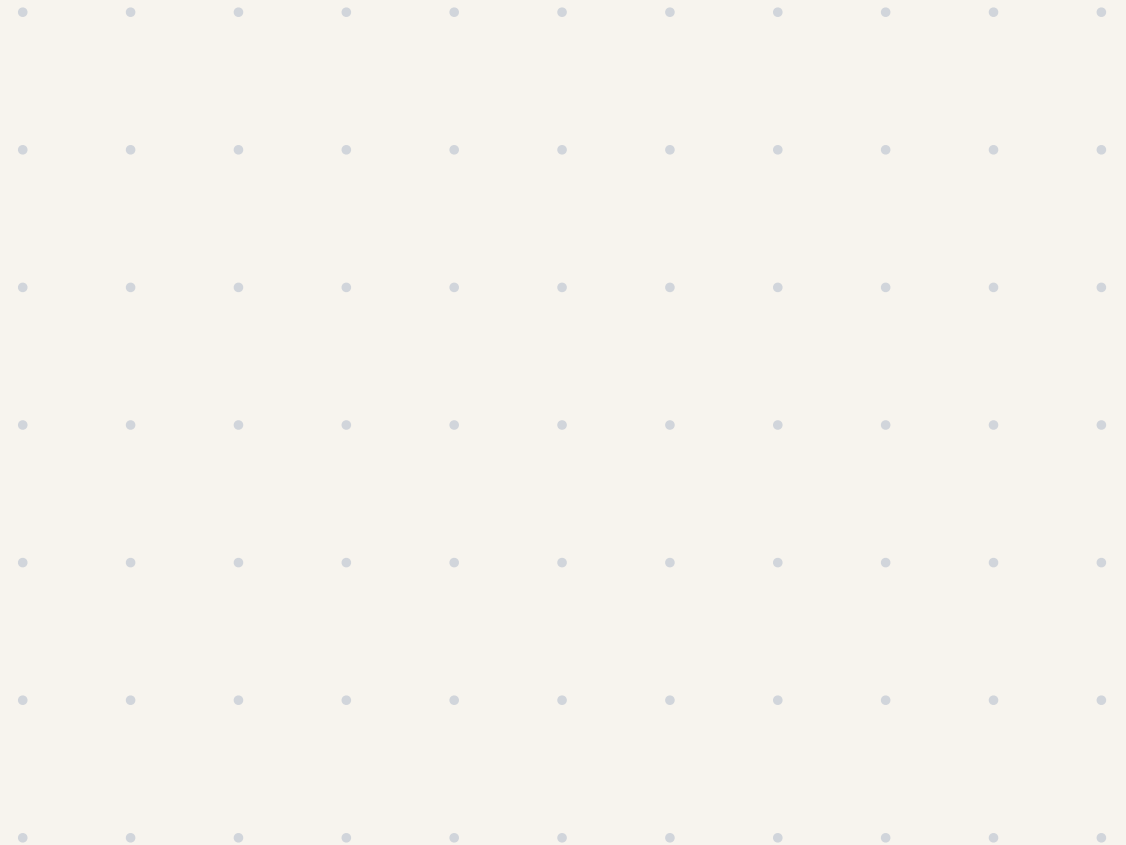


EXAMPLE 04

8 around circle + profession

- ▶ Eight people around a circular table face the centre.
- ▶ Each has a distinct profession.
- ▶ Doctor sits opposite to the engineer.
- ▶ Lawyer is third to the right of the doctor.
- ▶ Teacher sits between the lawyer and the chef.
- ▶ Architect is to the immediate left of the teacher.

WORKING

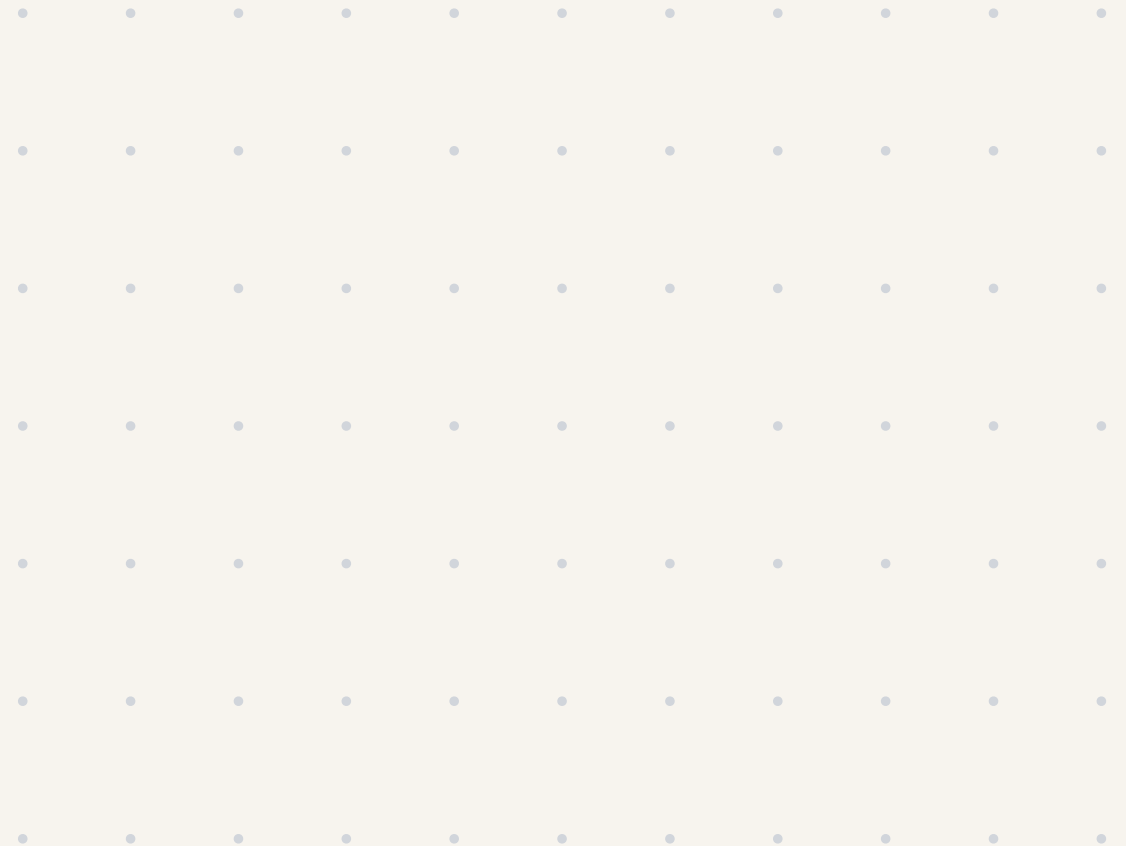


EXAMPLE 05

8 around square table — 2 per side

- ▶ Eight people sit around a square table; two per side.
- ▶ All face the centre of the table.
- ▶ A and B sit on the same side; A is to B's left.
- ▶ C sits opposite to A; D is opposite to B.
- ▶ E and F sit on the side opposite to A and B's side.
- ▶ G sits between C and the corner adjacent to E.

WORKING



EXAMPLE 06

8 around circle — anti-clockwise sweep

- ▶ Eight people around a round table; all face the centre.
- ▶ Walk anti-clockwise from A: B, C, D, E, F, G, H.
- ▶ But — clue 3 says A and C are NOT neighbours.
- ▶ So the anti-clockwise order has gaps; deduce real order.
- ▶ E sits opposite A; F is immediate right of E.
- ▶ H sits between A and G.

WORKING

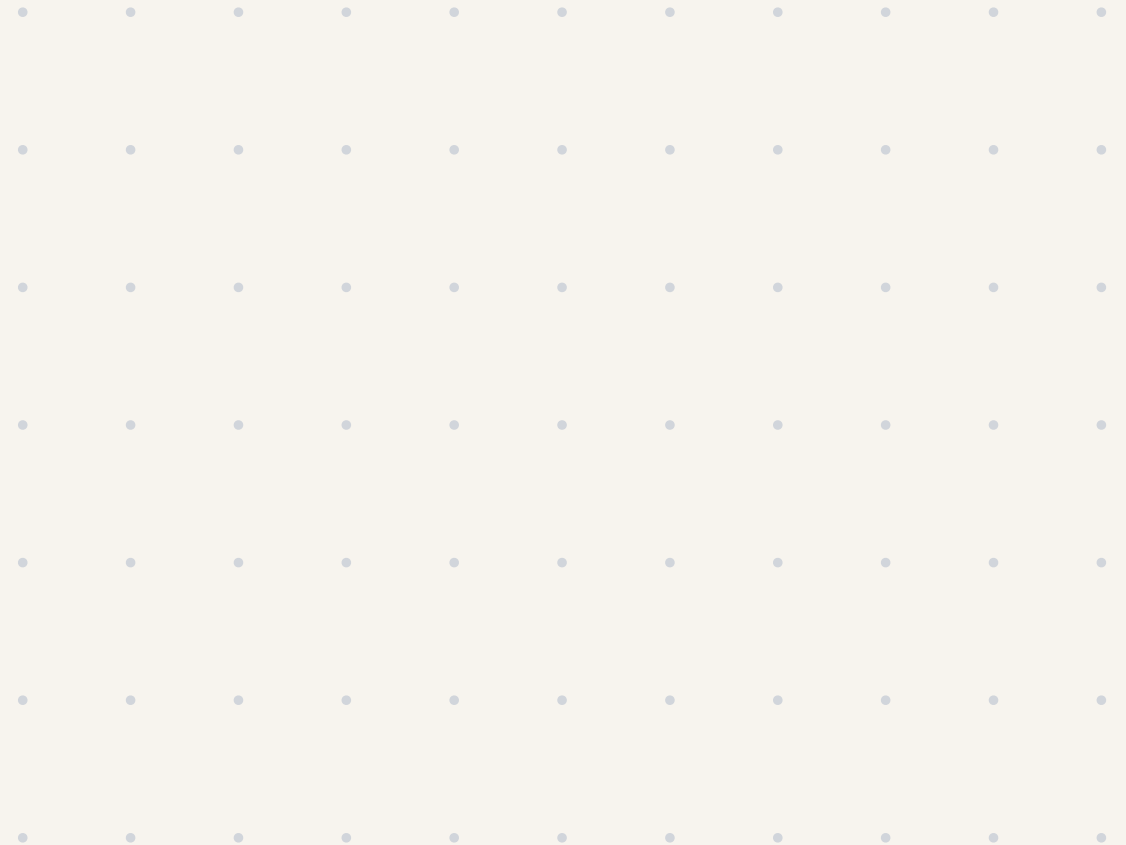


EXAMPLE 07

6 around circle, facing centre

- ▶ Six people around a round table face the centre.
- ▶ M is immediate right of N.
- ▶ O sits opposite to M.
- ▶ P is second to the right of O.
- ▶ Q is between N and O.
- ▶ R takes the only remaining seat.

WORKING

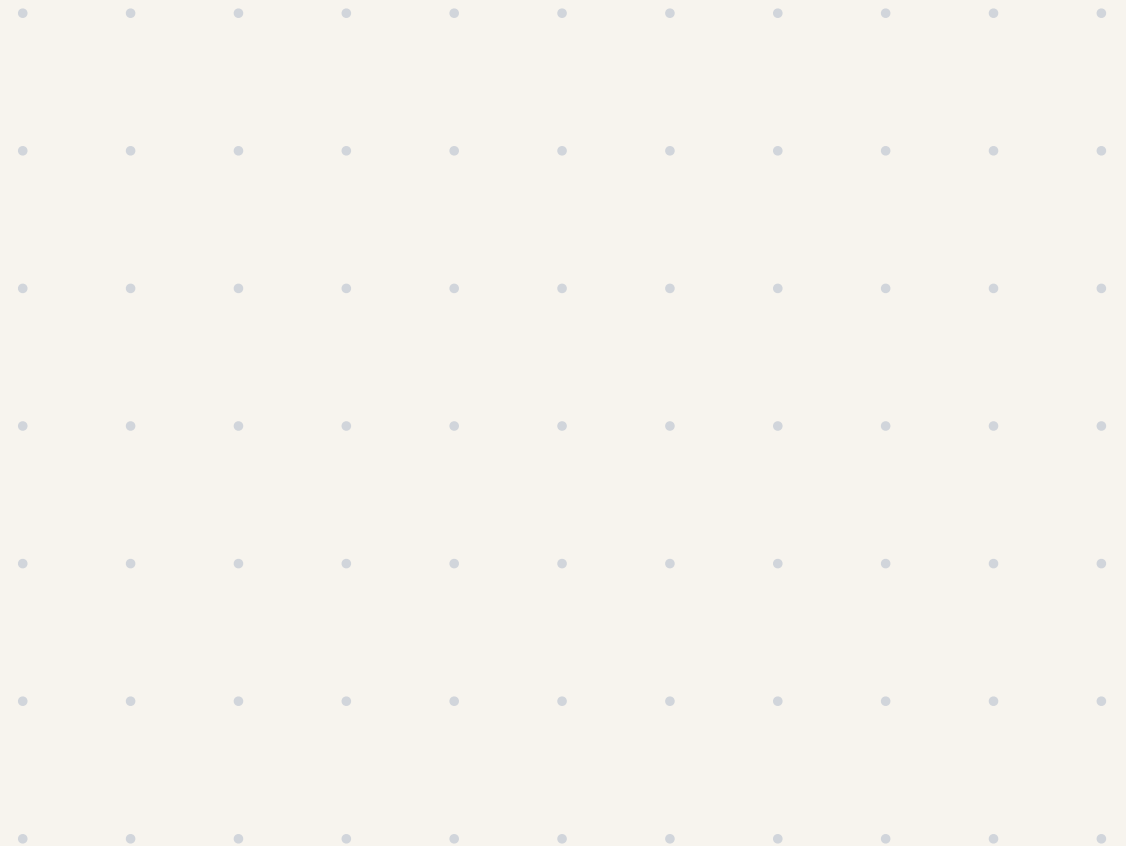


EXAMPLE 08

8 around circle, mixed neighbour clues

- ▶ Eight people around a circular table; all face the centre.
- ▶ P is third to the left of Q; R is opposite P.
- ▶ S is to the immediate right of R.
- ▶ T sits between Q and U.
- ▶ V is fourth to the right of P.
- ▶ W sits opposite S; X takes the remaining seat.

WORKING



EXAMPLE 09

8 around square — 1 corner + 1 middle each side

- ▶ Eight at a square table; one at each corner, one at each side's middle.
- ▶ Corners face centre; middles face the opposite middle.
- ▶ A is at a corner; B sits at the middle directly clockwise of A.
- ▶ C is opposite A across the centre.
- ▶ D is the middle directly clockwise of C.
- ▶ E sits at the corner anti-clockwise of D.

WORKING

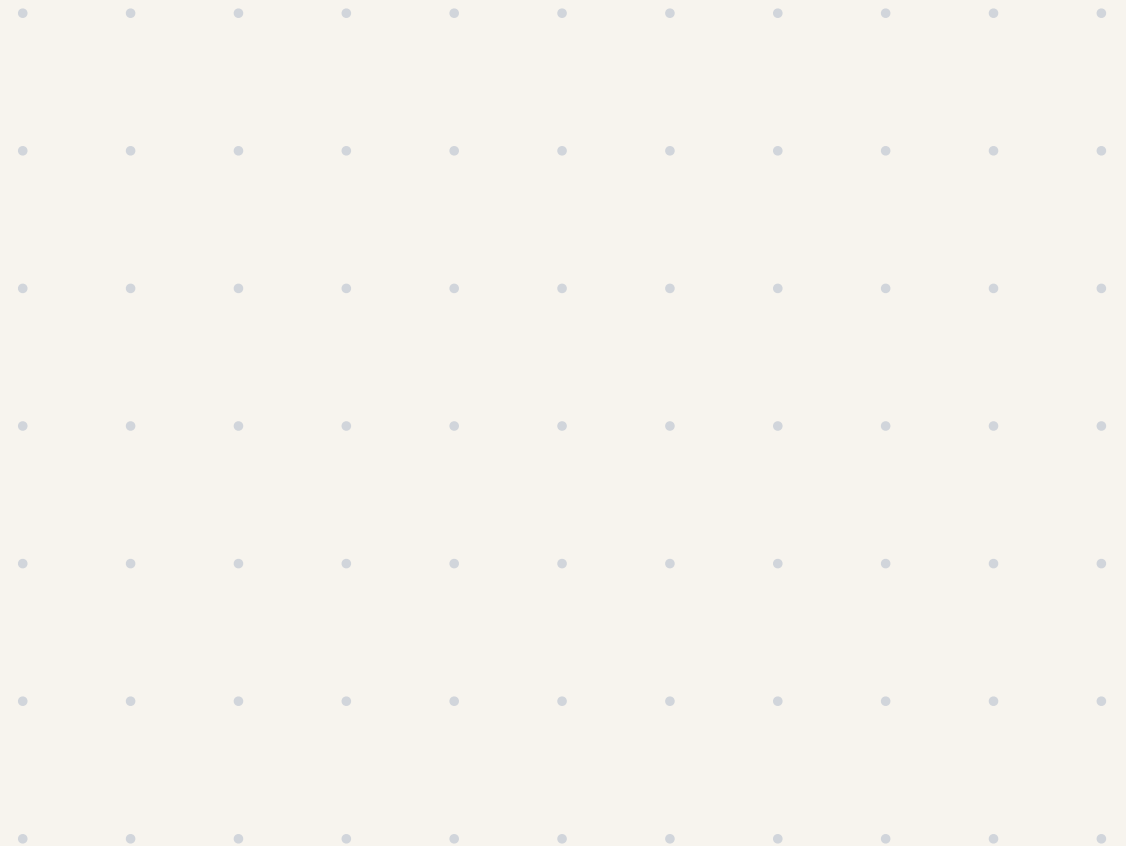


EXAMPLE 10

10 around circle — heavy

- ▶ Ten people around a round table; all face the centre.
- ▶ A is fourth to the left of B; B is opposite C.
- ▶ D is third to A's right.
- ▶ E sits between C and D; F is immediate left of E.
- ▶ G is opposite F; H is immediate right of G.
- ▶ I sits between B and H; J takes the remaining seat.

WORKING

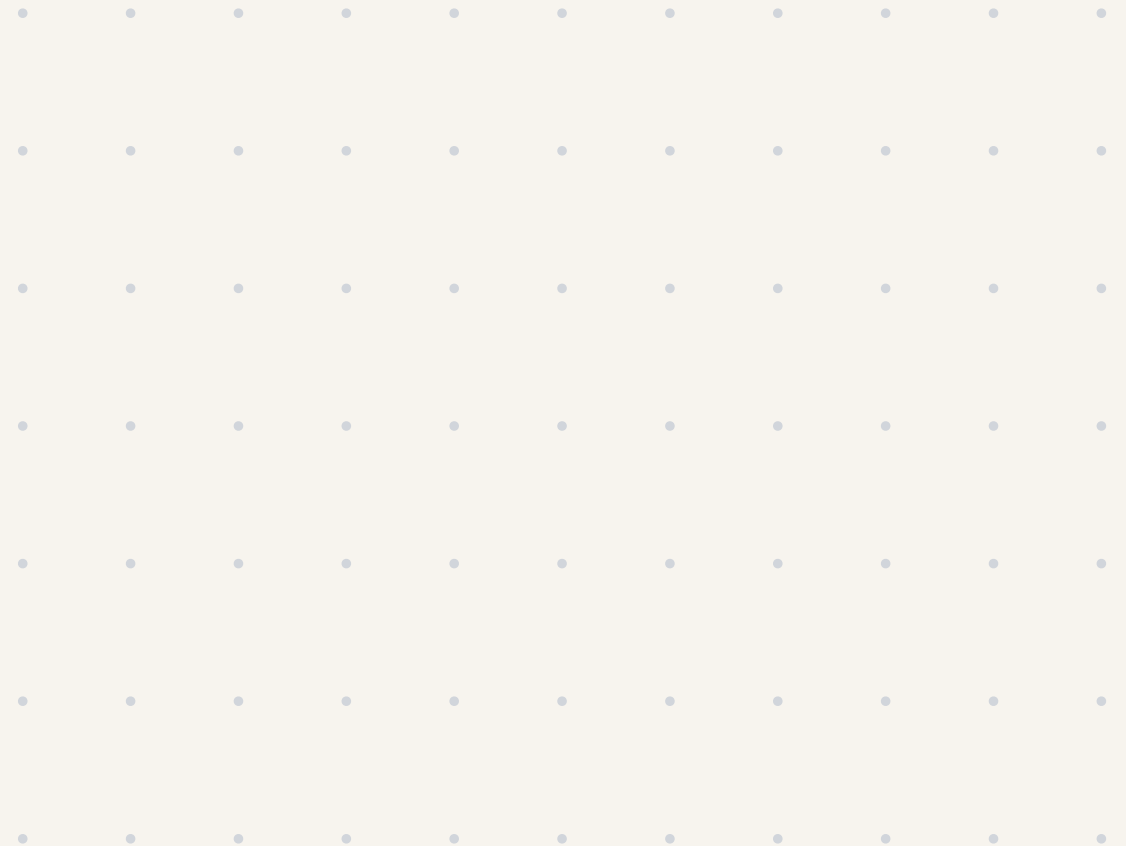


EXAMPLE 11

8 around circle — facing-away variant

- ▶ Eight people around a round table; all face AWAY from the centre.
- ▶ A is second to the right of B (per A's perspective).
- ▶ C is opposite to A.
- ▶ D is immediate left of C (per C's perspective).
- ▶ E sits between B and the person opposite to B.
- ▶ F is third to C's right.

WORKING



EXAMPLE 12

Capstone — circle + profession + day

- ▶ Eight people around a circular table; all face the centre.
- ▶ Each has a distinct profession and a distinct weekday class.
- ▶ Doctor attends Monday; doctor sits opposite to the engineer.
- ▶ Tuesday-attendee is to the doctor's immediate right.
- ▶ Lawyer is third to the doctor's left; attends Friday.
- ▶ Teacher attends Wednesday; sits between lawyer and engineer.

WORKING



PART 04

IV Wrap & Homework

*Recap the five drills.
Pick up Practice 03 on your way out.*

RECAP & HOMEWORK

What we drilled today

- ✓ Linear grammar locked
- ✓ Left-right inversion drilled
- ✓ Fix-first method
- ✓ Nth-to-the-left counting
- ✓ Final-check sweep

HOMEWORK

Practice Sheet 03

24 questions · 24 minutes

+1 / -0.25 · Target $\geq 18/24$

NEXT · L4 · MIXED FACING +
COMBOS