

01

SEATING ARRANGEMENTS · LECTURE 01 OF 05

Linear Seating — Foundations

Direction rules · Left-right inversion · Neighbour notation

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 FRAME

Linear seating — the grammar

- **Single row, drawn left-to-right**
Box per seat, facing arrow above the row
- **Facing direction comes first**
↑ for North, ↓ for South — always before clues
- **Perspective belongs to the seated person**
Their left, not yours, the reader's
- **Read neighbour words exactly**
Immediate / second / third / between

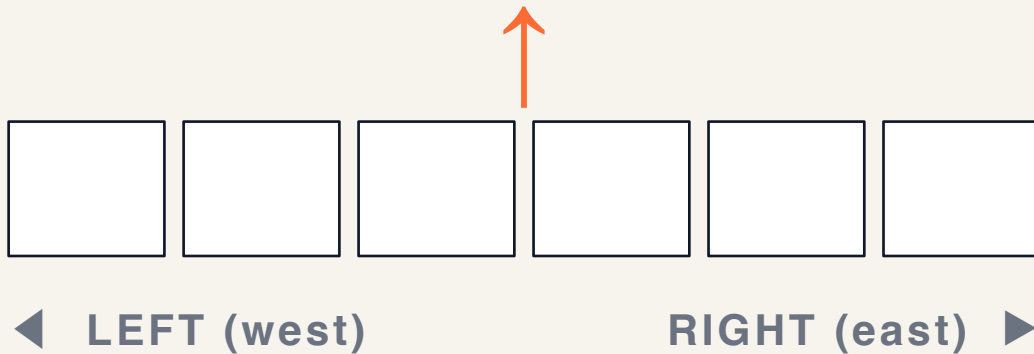
MEMORISE

*Facing N → my left = west.
Facing S → my left = east.
Every diagram begins here.*

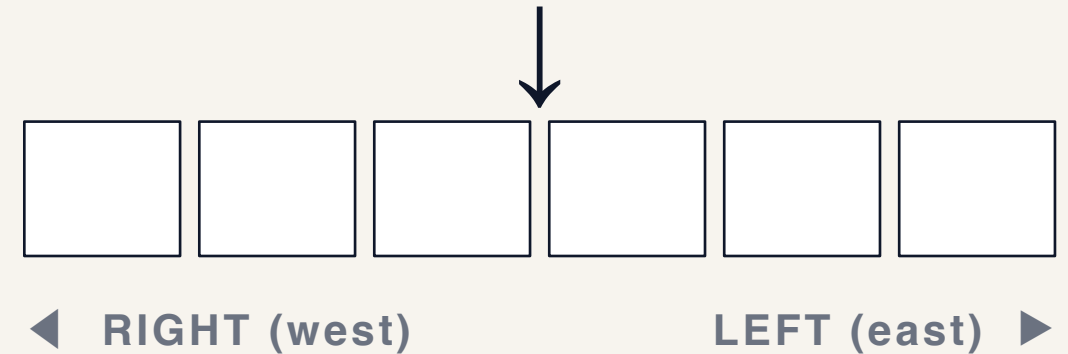
VISUAL · INVERSION DRILL

Left and right flip with facing

FACING NORTH



FACING SOUTH



Same row · every left / right clue flips with the arrow.

CONCEPT · INVERSION

Left and right flip with facing

- All facing North
Right moves east — same as reader
- All facing South
Right moves west — opposite of reader
- Mixed facing in the same row
Compute left / right per person
- Whose left, whose right?
Always ask before pencilling the answer

THE TRAP

Most students get the diagram right but report left from their own seat. Always pause: whose perspective?

CONCEPT · NEIGHBOUR CLUES

Read the clue, syllable by syllable

■ Immediate left of X

Box touching X on X's left — zero gap

■ Second to the left of X

Skip one seat, then place — gap of one

■ Third to the right of X

Skip two seats, then place

■ Sits between X and Y

Gap may vary unless 'exactly' is stated

FINGER DRILL

Every nth-to-the clue gets a finger trace on the diagram before you write. Slow is fast.

PART 02

II

The Method

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

METHOD · FIX-FIRST

Solve in this order, every time

- Step 1. List positive position clues
Ends, between-pairs, nth-to-the-left
- Step 2. Anchor the most fixed clue
End clues are gold. Start there.
- Step 3. Apply each positive clue in turn
Two placements possible? Draw both, prune later
- Step 4. Apply negative clues last
Negatives prune. They never place.
- Step 5. Final-check sweep
Re-verify every clue against the diagram

TIMING

*5–6 min flat per CLAT set.
Diagram = 3 min.
Riders = 2–3 min.
Over 4 min on diagram?
Restart.*

METHOD · COMMON ERRORS

What students get wrong

- Drawing without the facing arrow
Every left / right becomes a guess
- Reporting from your own perspective
Always: whose left? Pause and ask
- Skipping the final-check sweep
The 1-clue silent miss — CLAT's favourite trap
- Starting from a negative clue
Negatives prune, they never place
- Confusing 'second to' with 'second from'
'To' = from the person. 'From' = from the end.

LINEAR SEATING ARRANGEMENTS — FOUNDATIONS

CLASS HABIT

*From today: every problem starts with the facing arrow.
No arrow, no answer.*

PART 03

III

Live Solving

Twelve examples.

Left = problem · Right = your canvas.

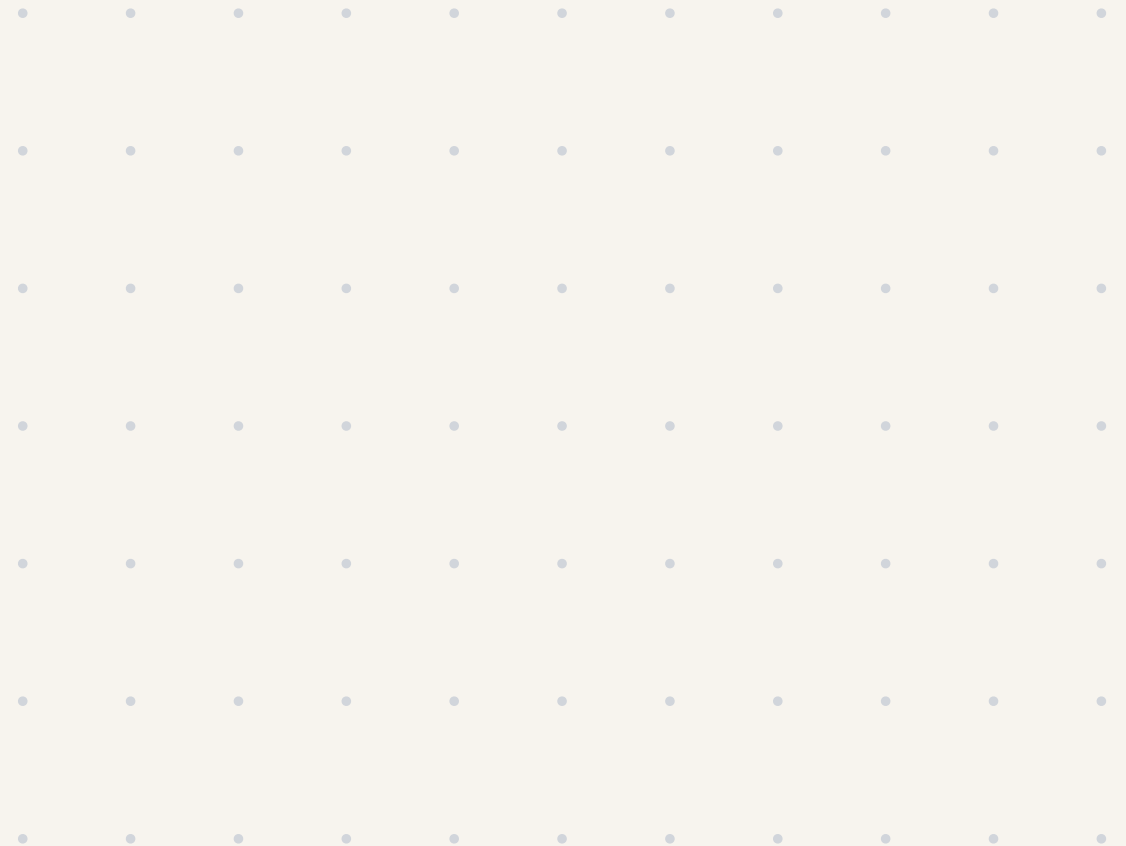
Faculty asks the riders orally.

EXAMPLE 01

Row of 5, facing North

- ▶ Five friends A, B, C, D, E sit facing North.
- ▶ B sits at the right end of the row.
- ▶ A is second to the left of B.
- ▶ C neighbours A but not B.
- ▶ D is not at the left end.

WORKING

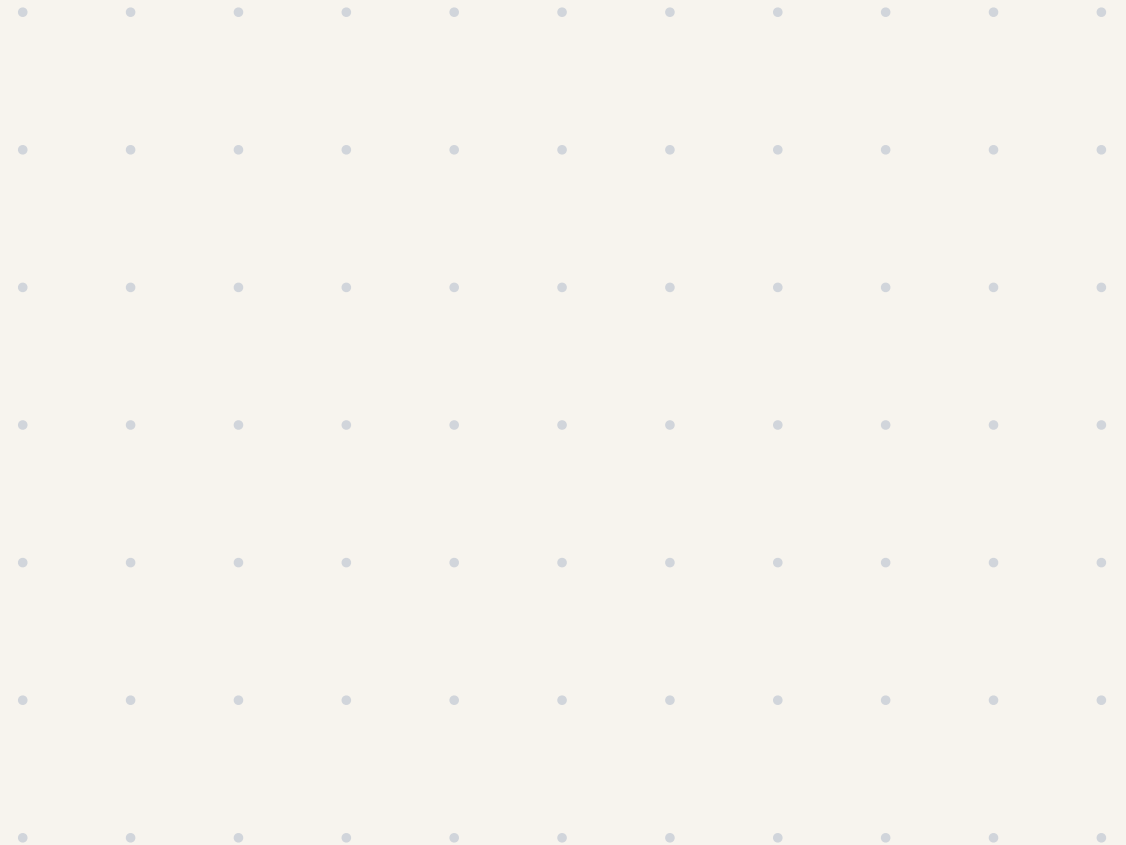


EXAMPLE 02

Row of 7, facing North

- ▶ Seven students P, Q, R, S, T, U, V face North.
- ▶ T sits at the centre of the row.
- ▶ P is third to the left of T.
- ▶ Q is to the immediate right of T.
- ▶ Only U sits between Q and R.
- ▶ S sits between P and T. V is not P's neighbour.

WORKING

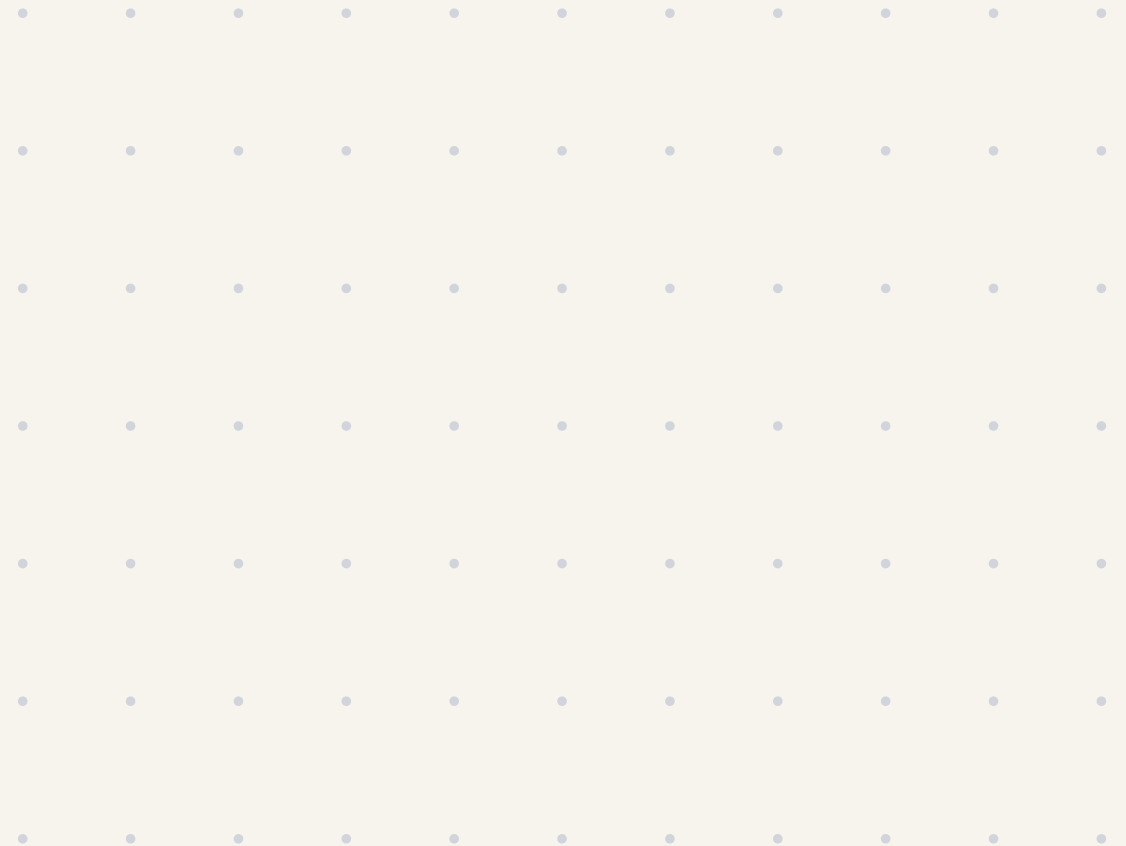


EXAMPLE 03

Row of 6, facing North

- ▶ Six friends A through F sit facing North.
- ▶ C is to the immediate left of A.
- ▶ B is at one extreme end of the row.
- ▶ D is second to the right of B.
- ▶ E is not a neighbour of A.

WORKING

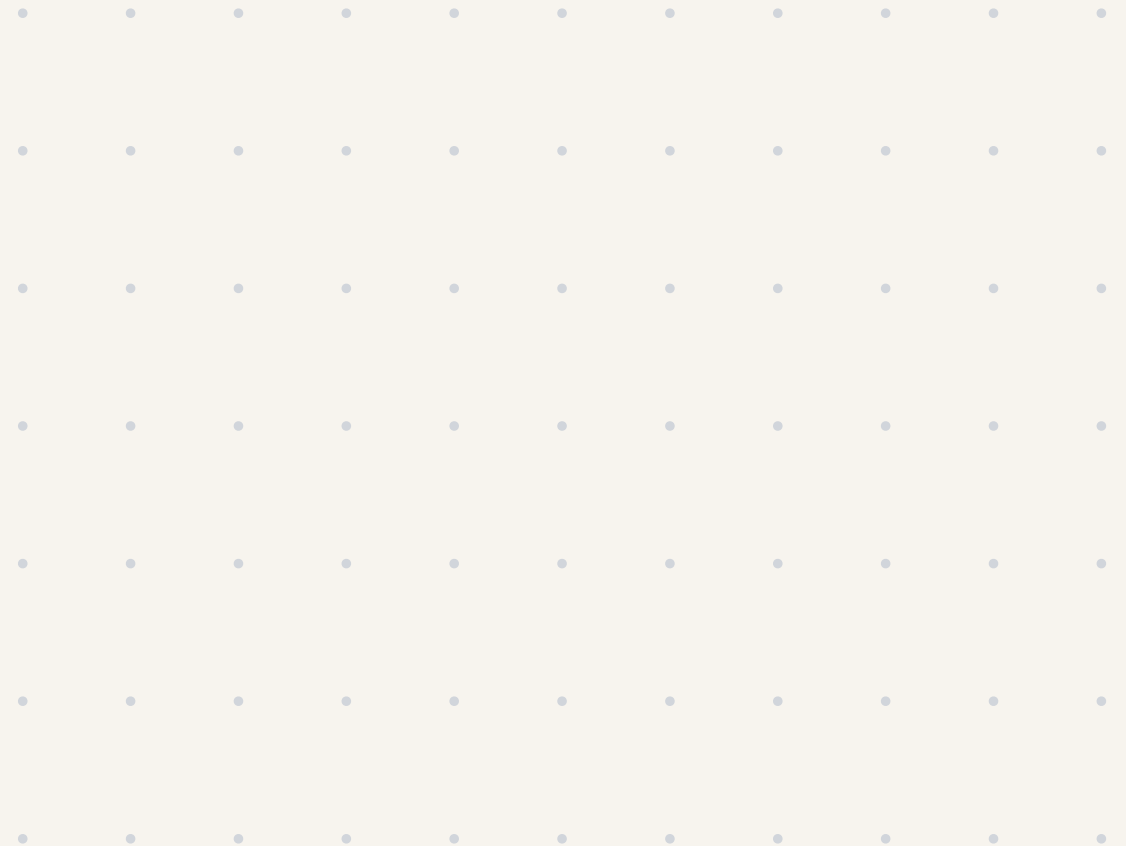


EXAMPLE 04

Row of 7, facing South

- ▶ Seven students P, Q, R, S, T, U, V face South.
- ▶ R sits at the right end of the row.
- ▶ Q is third to the left of R.
- ▶ P neighbours Q but not R.
- ▶ Two people sit between P and V.
- ▶ S sits to V's immediate right.

WORKING

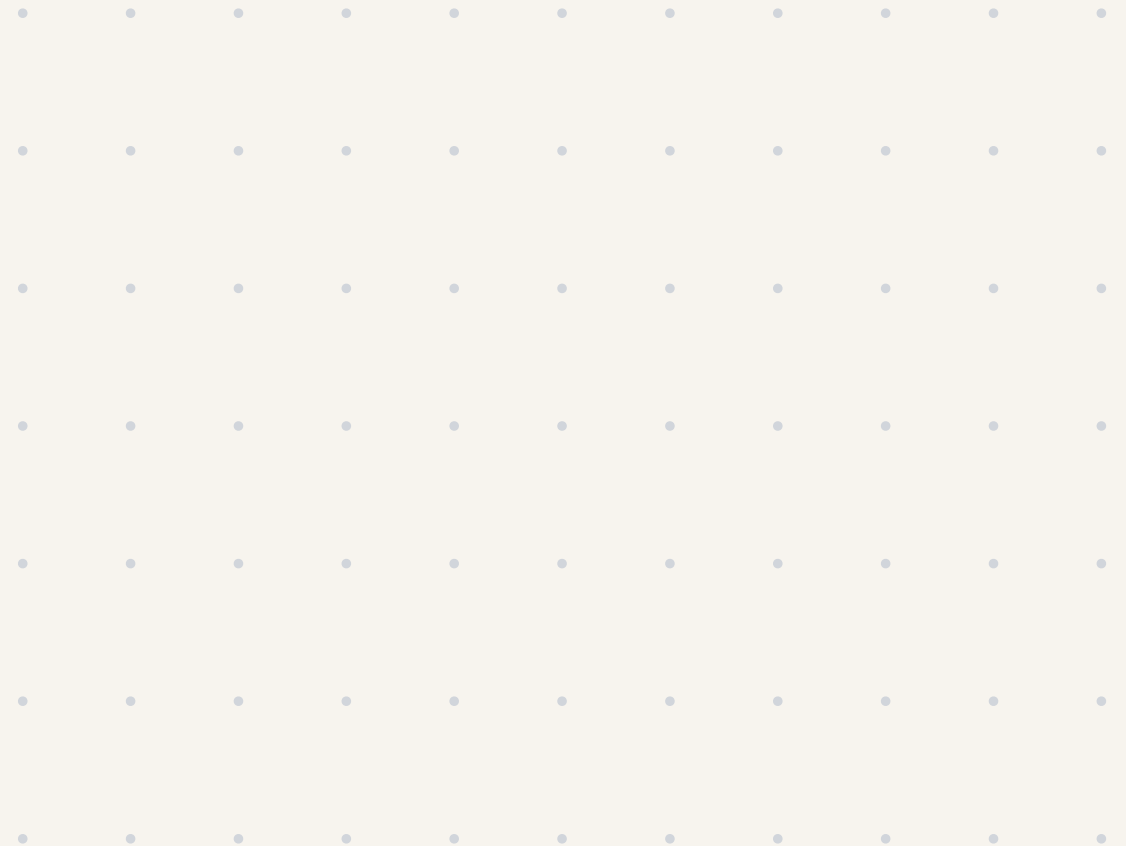


EXAMPLE 05

Row of 8, mixed N and S

- ▶ Eight people, four face North, four face South.
- ▶ A faces North; A is third to D's left.
- ▶ G neighbours A and faces opposite to A.
- ▶ B at one extreme end, B faces South.
- ▶ One person sits between B and F; F faces North.
- ▶ E is second to C's right; same direction as C.

WORKING



EXAMPLE 06

Row of 6, direction-deducible

- ▶ Six teachers L, M, N, O, P, Q sit in a row.
- ▶ Facing direction is NOT stated — deduce it.
- ▶ L is to M's immediate left.
- ▶ N is second to the right of L.
- ▶ O is at an extreme end; P is not O's neighbour.
- ▶ Q sits between M and N.

WORKING

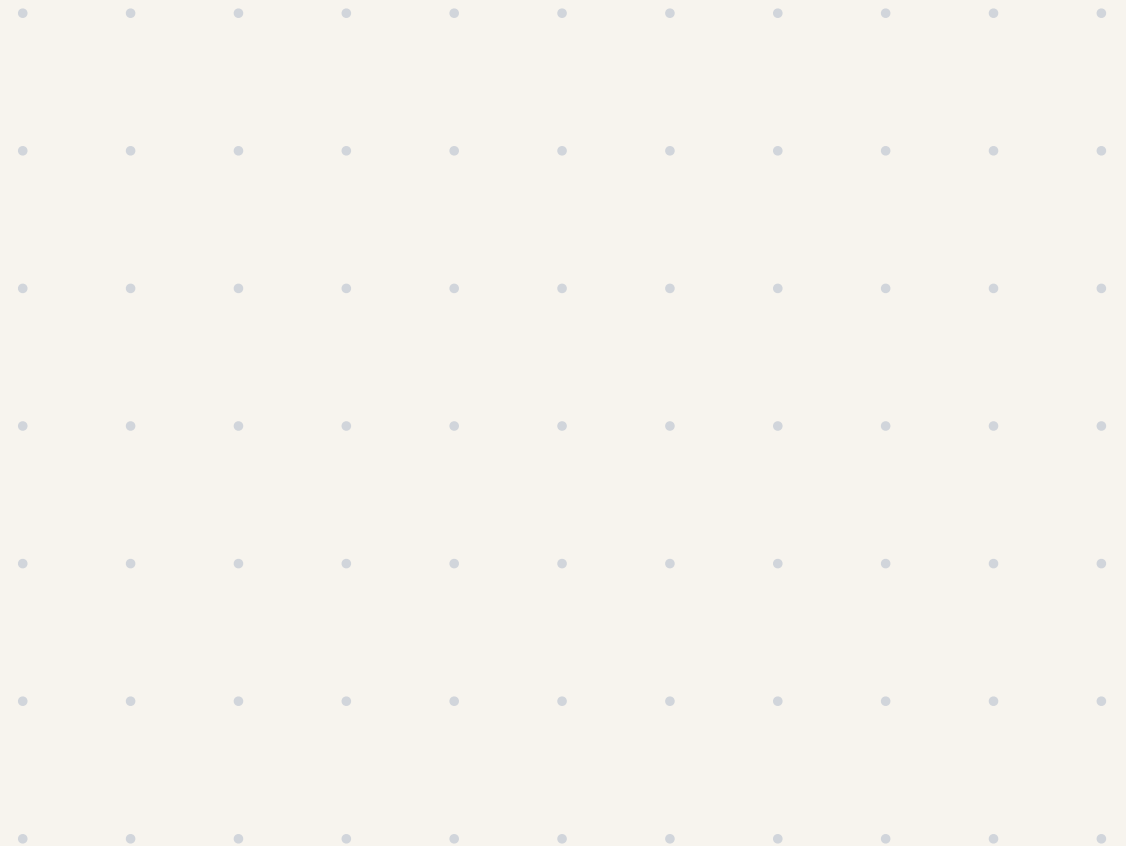


EXAMPLE 07

Row of 8 with rank rider

- ▶ Eight candidates face North, ranked 1 to 8.
- ▶ A (rank 3) sits at the left end.
- ▶ The rank-1 candidate is second to A's right.
- ▶ B sits to the immediate right of rank 1.
- ▶ C (rank 6) sits at the right end.
- ▶ D is third to C's left.
- ▶ F (rank 4) is second to C's left.

WORKING

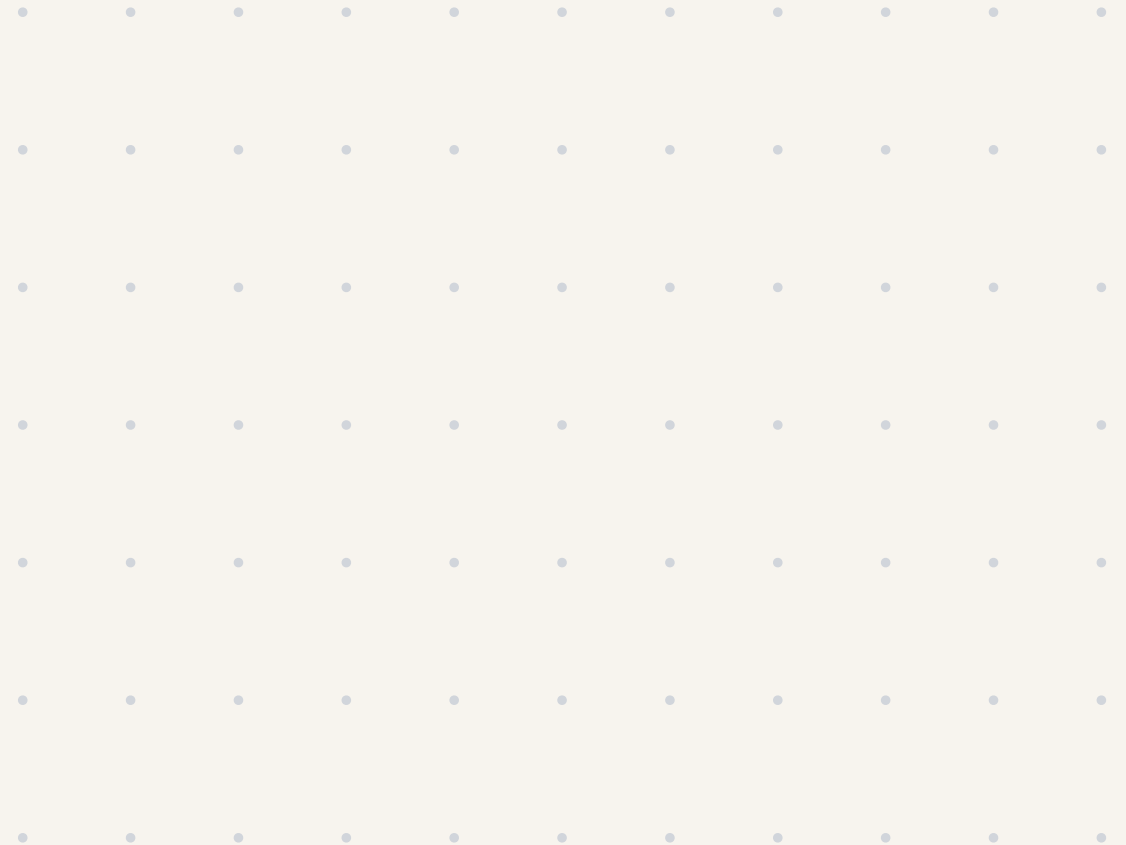


EXAMPLE 08

Row of 7, mixed with hard count

- ▶ Seven managers in a row; mixed N / S facing.
- ▶ W sits at the centre of the row.
- ▶ V is second to W's left; V faces North.
- ▶ X is V's immediate right and faces opposite to V.
- ▶ Y sits at one extreme end and faces South.
- ▶ Exactly three managers face North.

WORKING

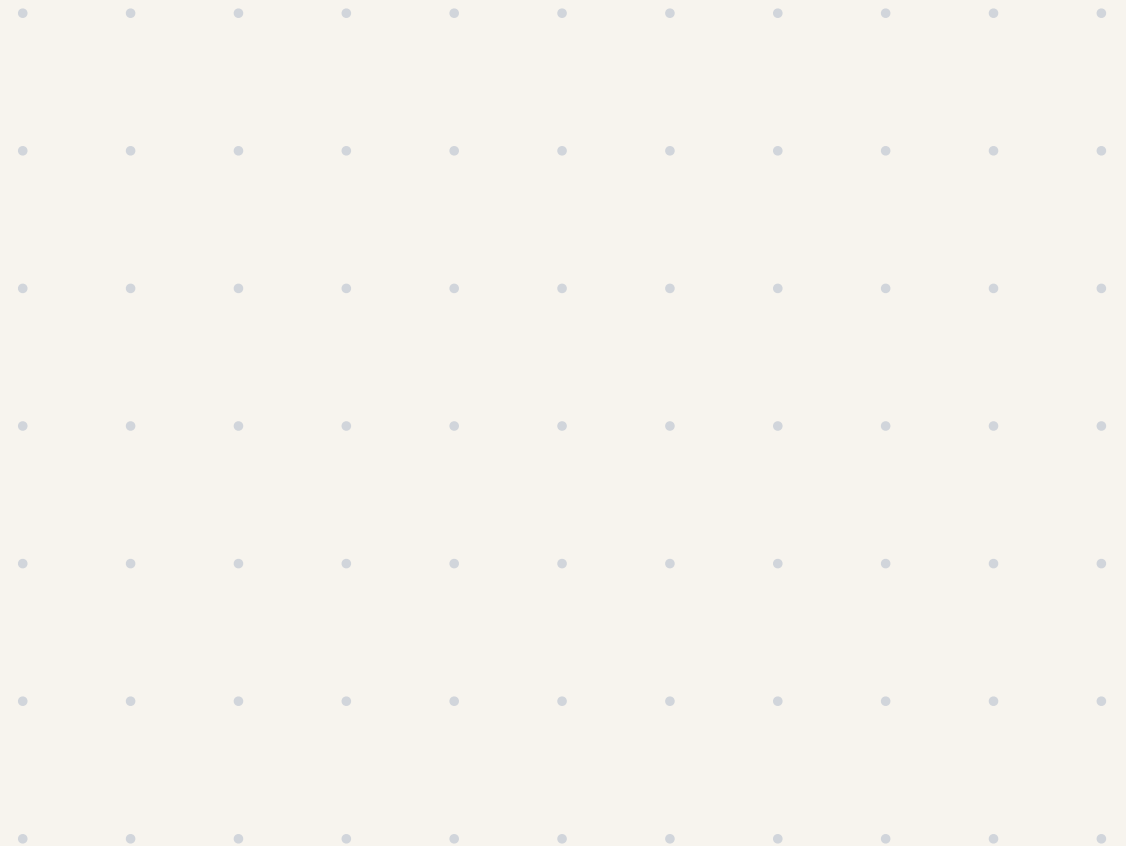


EXAMPLE 09

Row of 7 + day-of-week rider

- ▶ Seven friends face North, each on a different weekday.
- ▶ P attends Wednesday.
- ▶ P is third to the left of the Monday-attendee.
- ▶ Q sits at the right end; Q does not attend Sunday.
- ▶ The Saturday-attendee sits at the left end.
- ▶ T attends Friday; T is second to S's right.

WORKING

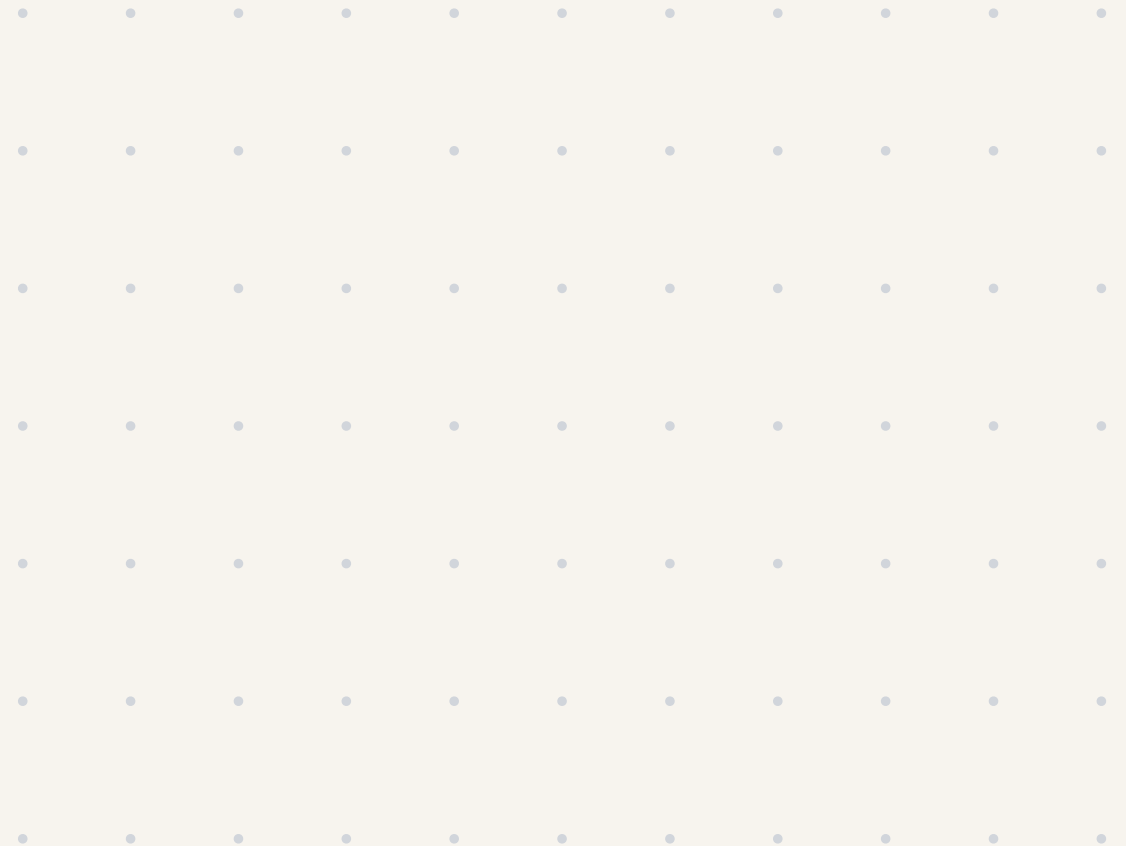


EXAMPLE 10

Row of 8 with one empty seat

- ▶ Eight people in eight seats facing North.
- ▶ One of the eight seats is empty.
- ▶ A sits at one extreme end of the row.
- ▶ The seat next to A is empty.
- ▶ C is second to A's right.
- ▶ D is third to C's right; E to D's left.
- ▶ B sits between F and G; H at the other end.

WORKING

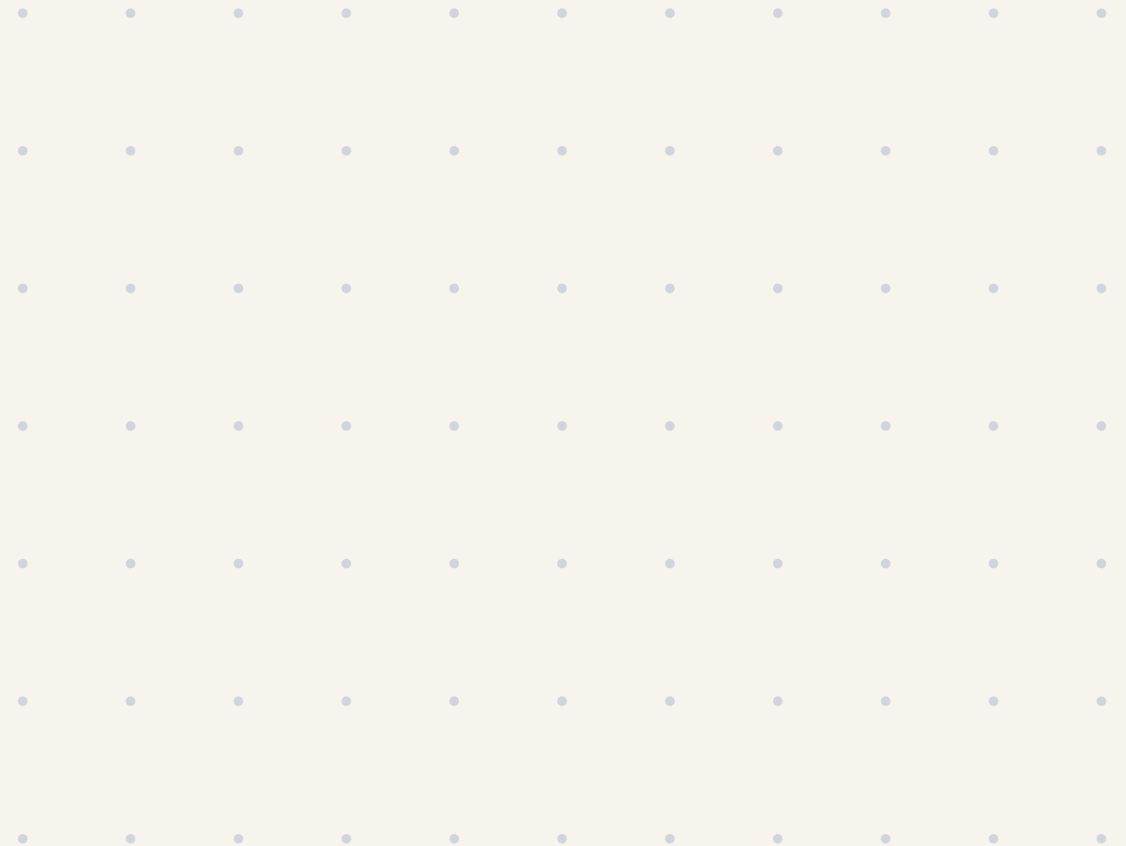


EXAMPLE 11

Row of 6 + profession combo

- ▶ Six experts face North; distinct professions.
- ▶ Architect at left end; banker at right end.
- ▶ A is the doctor, second to architect's right.
- ▶ B sits to A's immediate left; not the architect.
- ▶ D is the engineer; not a neighbour of A.
- ▶ C sits between the teacher and the banker.

WORKING

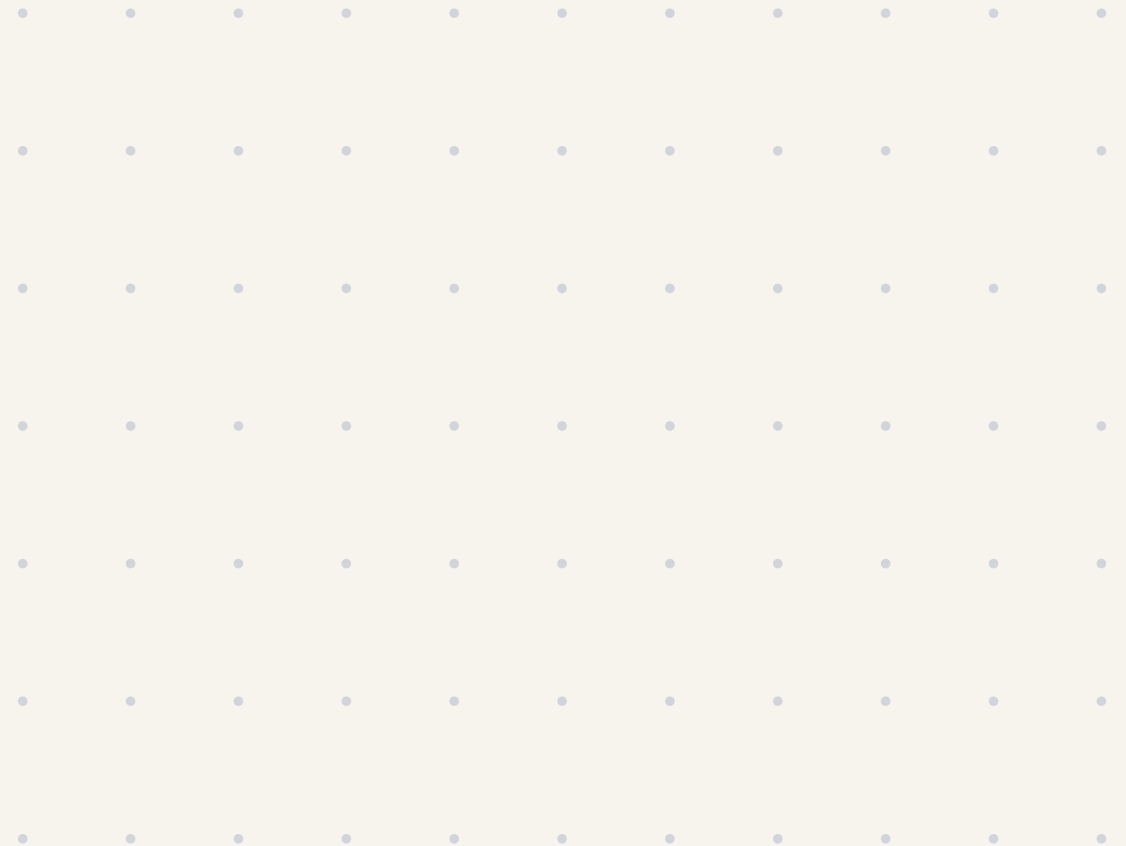


EXAMPLE 12

Hardest L1 — mixed facing + swap

- ▶ Eight friends in a row; four face N, four face S.
- ▶ A at one extreme end faces North.
- ▶ H at the other extreme end faces same as A.
- ▶ B is second to A's right; B faces South.
- ▶ C neighbours B and faces opposite to B.
- ▶ D is third to H's left; D faces South.
- ▶ E and F sit next to each other; both face South.

WORKING



PART 04

IV Wrap & Homework

*Recap the five drills.
Pick up Practice 01 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 01

24 questions · 24 minutes

+1 / -0.25 · Target $\geq 18/24$

NEXT · L2 · DOUBLE ROW