

Matrix Grid Questions

How to build grid questions and choose the right answering rules

A matrix grid asks several related questions at once. Instead of repeating the same answer scale on ten separate screens, you list the topics down the left as rows, list the answer choices across the top as columns, and the respondent fills in the grid.

This guide covers what a matrix question is, how to build one, and — the part that matters most — how to choose the rule that controls what a respondent is allowed to select.

1. What a matrix question looks like

Here is a satisfaction grid. Four topics down the side, five ratings across the top:

	Very poor	Poor	OK	Good	Excellent
Staff friendliness				•	
Speed of service			•		
Cleanliness					•
Value for money		•			

The respondent answers four questions in the time it would take to read one. That compactness is the whole point of a grid — and it is also why the answering rules matter, because the same layout can mean very different things.

2. Building a matrix question

1. In the form builder, add a question and choose Matrix Grid as the type.
2. Enter the Question Label — the instruction the respondent reads above the grid.
3. Add your Row Values. These are the topics being asked about, one per row.
4. Add your Column Values. These are the answer choices, shown across the top.
5. Choose a Pattern. This sets how many answers a respondent may give (see section 3).
6. Pick a Display Type — radio buttons, checkboxes, or selectable cells.
7. Optionally tick Add N/A Column to give respondents an opt-out.

8. Save the question. The preview updates as you type, so you can check it before saving.

Tip Keep rows to eight or fewer and columns to six or fewer. Beyond that, respondents start "straight-lining" — picking the same column all the way down without reading — and your data quality drops.

Important Do not use commas inside a row or column label. Commas separate one value from the next, so "Overall, how satisfied are you?" would be treated as two separate rows. Rephrase as "Overall satisfaction" instead.

3. Choosing the answering pattern

The Pattern setting is the most important choice you will make. It controls two separate things: how many columns a respondent may tick within a single row, and whether the same column may be reused further down the grid.

Four ready-made patterns cover almost every survey. Pick the one that matches your question and the rest is handled for you.

Rate each row

One answer per row · the same column can be reused. This is the standard rating grid and the right choice most of the time.

Use it when every row needs exactly one answer and it is perfectly normal for several rows to get the same answer.

Example: *"How satisfied are you with each of the following?" Three services can all be rated "Good" — that is a real answer, not a mistake.*

Select all that apply in each row

Several answers per row · the same column can be reused. Use this when a row can honestly have more than one answer.

Forcing a single choice here would invent a preference the respondent does not have.

Example: *"Which of these banks would you associate with each statement?" A respondent may feel two banks have equally good apps, and one bank may win on several statements.*

Rank rows

One answer per row · each column can be used only once. Use this to force a genuine ordering with no ties.

Once a respondent uses a column, it is unavailable for every other row. Set up the same number of columns as rows.

Example: *"Rank these five features from most to least important." Once 1st place is given to one feature, no other feature can take it.*

Assign each column to one row

Several answers per row · each column can be used only once. Use this for allocation, where each item has exactly one home but one holder can take several items.

Example: *"Which tasks does each team member own?" A task has one owner, but one person may own three tasks.*

At a glance

Pattern	Answers per row	Column reuse	Typical question
Rate each row	Exactly one	Allowed	How satisfied are you with each service?
Select all that apply	Any number	Allowed	Which brands match each statement?
Rank rows	Exactly one	Not allowed	Rank these features 1 to 5
Assign each column	Any number	Not allowed	Who owns each task?

4. Custom rules

If none of the four patterns fits, choose Custom and set the two rules yourself. The plain-language summary beneath the fields always tells you what the current combination means.

Responses per row

Setting	What it does
One response per row	The respondent picks exactly one column in each row. Choosing a second replaces the first.
Multiple responses per row	The respondent may tick as many columns as they like in each row.
Up to N responses per row	The respondent may tick several columns, but no more than the limit you set. Use this to force people to discriminate rather than ticking everything.

Reuse of a column

Setting	What it does
Unlimited reuse	Any number of rows may choose the same column. This is normal for rating scales.
One use per column	Once a column is chosen, no other row may use it. Use for ranking and unique assignment.
Up to N uses per column	A column may be chosen by several rows, up to the limit you set. Use for balanced allocation, for example no interviewer taking more than four regions.

Require every column to be used at least once

An optional coverage check. When ticked, a respondent cannot submit until every column has been chosen by at least one row. Useful when the grid is really an allocation exercise and nothing may be left unassigned.

Good to know The builder will not let you save a combination nobody could answer. Five rows with three columns and "one use per column" is impossible — two rows would have nothing left to pick — and you will see a message explaining exactly that.

5. Display type and the N/A column

Display Type controls how the grid looks. It does not change the rules — but it should match them, because the shape of a control tells a respondent how many answers they may give.

Display type	Best used for
Radio buttons	One answer per row. The round control is universally understood as "pick one".
Checkboxes	Several answers per row. The square control signals that more than one is allowed.
Selectable cells	Either rule. The whole cell highlights when chosen — larger tap targets, and good for mobile-heavy audiences.

The N/A column

Ticking Add N/A Column appends an extra column at the right-hand end. It behaves differently from your own columns in two useful ways:

- Choosing N/A clears everything else in that row, and choosing anything else clears N/A. A row cannot be both answered and not applicable.
- N/A is exempt from the column reuse rule. Even in a ranking grid, any number of rows may be marked N/A.

Add it whenever a row might genuinely not apply to some respondents. Without it, people either guess or abandon the survey.

6. What respondents see

Above the grid, a short line states the rule in plain language — for example "Select one per row" or "Select up to 3 per row. Each column can be used only once." Respondents know the constraint before their first tap rather than discovering it through an error.

When a rule blocks a choice, the unavailable cells are dimmed rather than hidden, so the grid keeps its shape and nothing appears to move. If someone taps a dimmed cell anyway, a short message explains why — for instance that a column is already used by another row, and which one.

An answer the respondent has already given is never blocked, so they can always change their mind. On a ranking grid, moving a row to a different column automatically frees the column it was using for someone else.

On a phone

A wide grid is unreadable on a small screen, so the layout changes. Each row becomes its own card with the row label at the top and the answer choices listed beneath it, each showing its column name. The rules work exactly the same way — only the presentation changes.

Keyboard and screen readers

Every cell can be reached with the Tab key and selected with Enter or Space, with a visible outline showing the current position. Cells are announced with their column name and whether they are selected.

7. Reading your results

Each response is recorded row by row, listing the columns chosen for that row. A row with several answers shows all of them together, so you can see the full pattern of a respondent's thinking rather than just a single value.

When analysing, keep the two grid types apart. A "one answer per row" grid gives one value per row and can be averaged or cross-tabulated directly. A "select all that apply" grid gives a set of choices per row, so the natural measure is the percentage of respondents who picked each column for each row — percentages will add up to more than 100, which is correct and expected.

8. Common mistakes

- Using a ranking grid when ties are legitimate. If two features really are equally important, forcing an order manufactures a preference that does not exist. Use "Rate each row" instead.
- Using "select all that apply" when only one answer makes sense. Respondents tick several, and the results become impossible to compare row against row.
- Too many rows. Grids longer than eight rows attract straight-lining. Split them into two questions.
- Radio buttons on a multiple-answer grid. The round control tells people to pick one, so they do — and you lose the extra answers you were trying to collect.
- Commas inside labels. These split one value into two. Rephrase the label.
- No N/A column on a grid where some rows will not apply. Respondents guess, and the guesses look like real data.

9. Questions we get asked

Can I change the rule after responses have come in?

You can, but responses already collected were given under the old rule and will not be re-validated. If a survey is live and collecting, it is safer to leave the rule alone and create a new question.

What happens to grid questions built before this update?

They keep working exactly as before. Existing questions are read using their original setting, so nothing needs to be rebuilt or re-saved.

Can a row be left blank?

Only if the question is not marked Required. When it is required, every row must have an answer before the form can be submitted, and the respondent is told which rows are still outstanding.

How many rows and columns can I have?

There is no hard limit, but readability sets a practical one. Beyond roughly eight rows or six columns the grid becomes tiring on desktop and long on mobile.

Why can I not save my question?

Almost always because the rules cannot be satisfied — most often more rows than columns combined with "one use per column". The message on screen names the exact conflict.