College-Ruled Paper with a Graph Margin Column: Layout, Use, and Checks

Complete worked example / separate answer key

A hypothetical sheet has rule spacing 7.0 mm and a grid cell of 3.5 mm. The margin column is 28 mm wide. How many grid cells fit across the column, and how many rule spacings equal the column width?

Answer: Cells across: 28 ÷ 3.5 = 8 cells. Rule spacings equal to column width: 28 ÷ 7.0 = 4 rule spacings. Check: 8 × 3.5 = 28 mm and 4 × 7.0 = 28 mm.

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Original tasks 1, 2, 3, 4 / complete keys

Task 1

A hypothetical sheet has rule spacing 6.0 mm and grid cell 3.0 mm. The margin column is 24 mm wide. Find the number of grid cells across the column and the number of rule spacings equal to the column width.

Answer: 8 grid cells across; 4 rule spacings.

Reason: 24 ÷ 3.0 = 8 cells. 24 ÷ 6.0 = 4 rule spacings. Both use millimetres consistently.

Check: Multiply back: 8 × 3.0 = 24 mm and 4 × 6.0 = 24 mm.

Task 2

A margin column is 30 mm wide with 5.0 mm grid cells. A calculation uses three rows of 5.0 mm each. How many millimetres of column height are used, and how many cells remain if the column is 40 mm tall?

Answer: 15 mm used; 25 mm remains, equal to 5 cells.

Reason: 3 × 5.0 = 15 mm. 40 − 15 = 25 mm. 25 ÷ 5.0 = 5 cells.

Check: Add used and remaining: 15 + 25 = 40 mm.

Task 3

A hypothetical design uses rule spacing 8.0 mm and a grid cell of 4.0 mm. The writing area is 120 mm wide and the margin column is 32 mm wide. What is the total width of writing area plus margin column, and how many grid cells fit in the margin?

Answer: Total width 152 mm; 8 grid cells in the margin.

Reason: 120 + 32 = 152 mm. 32 ÷ 4.0 = 8 cells.

Check: Subtract the margin from the total: 152 − 32 = 120 mm.

Task 4

A student writes a main line on a rule line and puts a two-step calculation in the margin: 12 mm + 8 mm = 20 mm, then 20 mm ÷ 4 = 5 mm. The grid cell is 5.0 mm. How many grid rows are needed for the two steps if each step occupies one row, and what is the total height used?

Answer: 2 rows; 10 mm total height.

Reason: Two steps occupy two rows. 2 × 5.0 = 10 mm.

Check: Count the rows and multiply by the measured cell height: 2 × 5.0 = 10 mm.

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Task 1, Task 2 / Separate answer key: answers, reasoning, and check methods for the four tasks

Answer key kept separate from the worksheet. Each task lists its answer, reasoning, and check method exactly as in the source.

Task 1 answer: 8 grid cells across; 4 rule spacings.

Task 1 reasoning: 24 ÷ 3.0 = 8 cells. 24 ÷ 6.0 = 4 rule spacings. Both use millimetres consistently.

Task 1 check: Multiply back: 8 × 3.0 = 24 mm and 4 × 6.0 = 24 mm.

Task 2 answer: 15 mm used; 25 mm remains, equal to 5 cells.

Task 2 reasoning: 3 × 5.0 = 15 mm. 40 − 15 = 25 mm. 25 ÷ 5.0 = 5 cells.

Task 2 check: Add used and remaining: 15 + 25 = 40 mm.

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Task 3, Task 4 / Answer key continued: Tasks 3 and 4

Continuation of the separate answer key for Tasks 3 and 4.

Task 3 answer: Total width 152 mm; 8 grid cells in the margin.

Task 3 reasoning: 120 + 32 = 152 mm. 32 ÷ 4.0 = 8 cells.

Task 3 check: Subtract the margin from the total: 152 − 32 = 120 mm.

Task 4 answer: 2 rows; 10 mm total height.

Task 4 reasoning: Two steps occupy two rows. 2 × 5.0 = 10 mm.

Task 4 check: Count the rows and multiply by the measured cell height: 2 × 5.0 = 10 mm.

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Worked example / Measurement diagram: rule spacing 7.0 mm, grid cell 3.5 mm, column width 28 mm

2 writing columns; 4 mm rule spacing; 12 mm left margin; 4 mm gutter; 28 mm label column; header fields: Rule spacing 7.0 mm, Grid cell 3.5 mm. Example design choices; measure and proof your own layout.

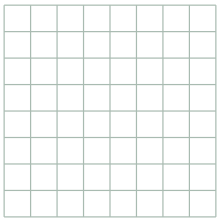


Reduced layout diagram: scale 19:50. All selected dimensions describe this example, not a paper, printer or binder standard.

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Worked example / Measurement grid: 3.5 mm cells, eight across the 28 mm column

Reference illustration of the 28 mm column with 3.5 mm cells; eight cells across. Not a student practice sheet.



8 columns × 8 rows; 3.5 mm square cells; actual size at 100% printing.

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Source rubric / reflection

- [ ] Lowercase bodies sit mainly between baseline and midline (0-2 points).
- [ ] Ascenders and descenders are distinguishable (0-2 points).
- [ ] Margin column is used for steps or notes, not copied text (0-2 points).
- [ ] Margin arithmetic is readable, aligned, and uses consistent units (0-2 points).
- [ ] Rule lines and grid rows align consistently across the page (0-2 points).
- [ ] Alternative letter styles are accepted if placement and legibility are consistent (0-2 points).

Reflection: What did you check, what did you change, and what will you try next?