Isometric Room Drawing: Grid, Walls, and Furniture Placement

Original task 1 / independent drawing and calculation

Task 1

Using a hypothetical step of 5 mm, draw a room 4 steps wide, 3 steps deep, and 3 steps high. State your convention and record the step counts for the room.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 2 / independent drawing and calculation

Task 2

On a grid with a hypothetical step of 8 mm, place a bed with a 3-step by 2-step footprint and a 1-step height, starting 1 step from the near corner along both floor axes. Describe the footprint corners and the vertical edges.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 3 / independent drawing and calculation

Task 3

A room is 5 steps wide, 4 steps deep, and 3 steps high on a hypothetical 10 mm step. A shelf has a 1-step by 1-step footprint and a 2-step height, placed at offset 2 steps along width and 1 step along depth. State whether the shelf fits under the wall height and show the arithmetic.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 4 / independent drawing and calculation

Task 4

Draw a room 6 steps wide, 4 steps deep, and 3 steps high on a hypothetical 10 mm step. Place two blocks: block A with a 2-step by 1-step footprint and 1-step height at offset 1,1; block B with a 1-step by 2-step footprint and 1-step height at offset 3,1. Check that the footprints do not overlap and record all counts.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.