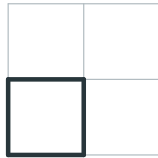
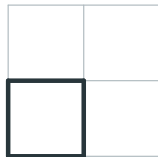


From three views to blocks: IR01

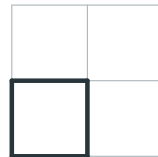
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 1. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

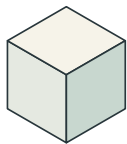


Front / from -y



Right / from +x

1 feasible model in the stated finite column class.

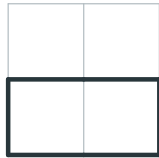


1: $y=0$ [1, 0]; $y=1$ [0, 0]

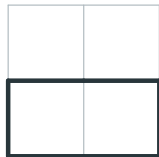
Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.

From three views to blocks: IR02

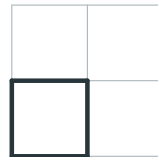
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 2. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

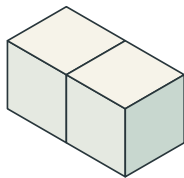


Front / from -y



Right / from +x

1 feasible model in the stated finite column class.

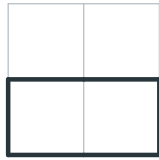


1: $y=0$ [1, 1]; $y=1$ [0, 0]

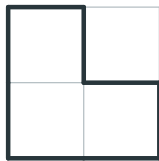
Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.

From three views to blocks: IR03

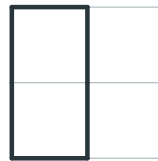
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 3. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

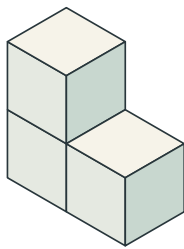


Front / from -y



Right / from +x

1 feasible model in the stated finite column class.

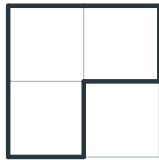


1: $y=0$ [2, 1]; $y=1$ [0, 0]

Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.

From three views to blocks: IR04

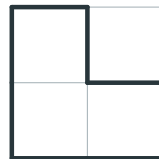
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 4. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

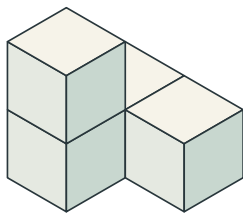


Front / from -y



Right / from +x

1 feasible model in the stated finite column class.

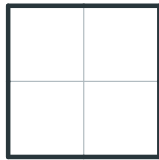


1: $y=0$ [2, 0]; $y=1$ [1, 1]

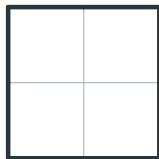
Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.

From three views to blocks: IR05

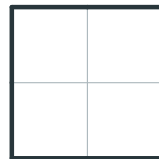
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 6. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

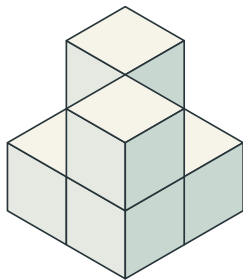


Front / from -y

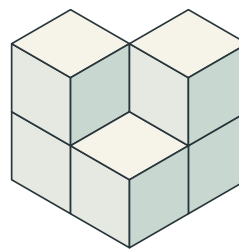


Right / from +x

2 feasible models in the stated finite column class.



1: $y=0$ [1, 2]; $y=1$ [2, 1]

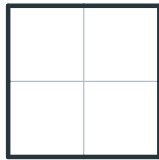


2: $y=0$ [2, 1]; $y=1$ [1, 2]

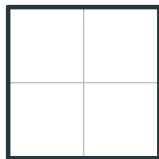
Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.

From three views to blocks: IR06

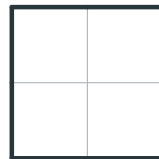
Find ALL permitted models. Each occupied cell is a solid column of 1 or 2 unit cubes on the base. Total cubes: 7. No overhangs or floating cubes. Each view-grid interval is one cube edge. The views show exterior silhouettes and occupied footprint only.



Top / y up

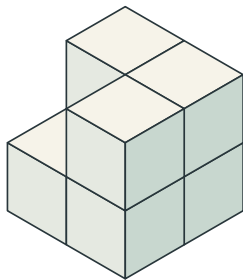


Front / from -y

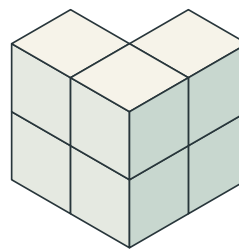


Right / from +x

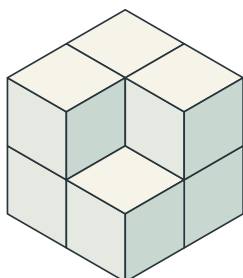
4 feasible models in the stated finite column class.



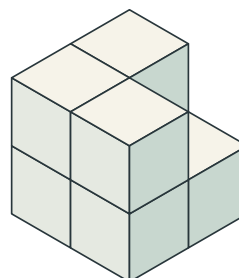
1: $y=0$ [1, 2]; $y=1$ [2, 2]



2: $y=0$ [2, 2]; $y=1$ [1, 2]



3: $y=0$ [2, 1]; $y=1$ [2, 2]



4: $y=0$ [2, 2]; $y=1$ [2, 1]

Every listed model satisfies both silhouettes, the top occupancy and the cube count. Other classes of solids are outside this exercise.