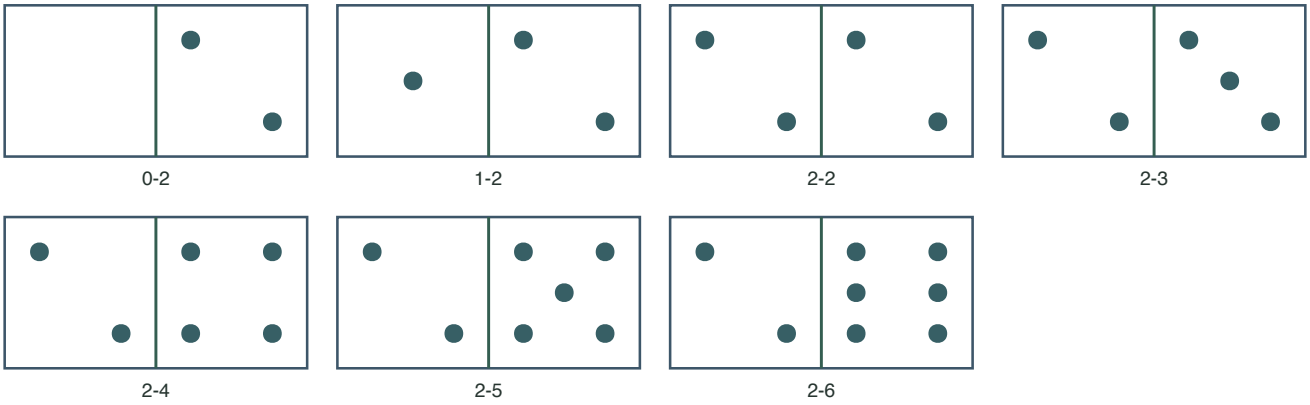
Printable Dominoes

Original prompt

Task 1 — Reference reading: using the ordered list 0-0 to 6-6, write out every tile that contains the number 2, in ordered form with the smaller number first.



Answer

0-2, 1-2, 2-2, 2-3, 2-4, 2-5, 2-6.

Reasoning

Every tile containing 2 pairs it with each number from 0 to 6 once; ordering each pair with the smaller number first avoids duplicates.

Check

Count the listed tiles: seven, matching the seven possible partners for 2.

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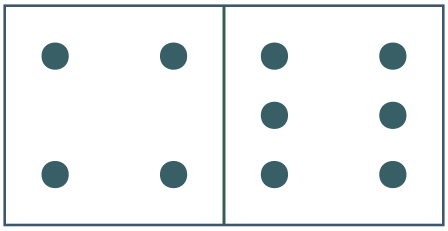
Task 2 — Tile construction: draw a 4-6 tile with a centre line and the correct pip pattern in each square.



Answer

A rectangle twice as long as wide with a centre line. The left square shows the 4 pattern (four corner pips); the right square shows the 6 pattern (two columns of three pips).

Reasoning

The tile joins 4 and 6, so each square uses the standard pattern for its number and the centre line separates them.

Check

Count pips: left square 4, right square 6, centre line present.

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Task 3 — Set completion: list all 28 tiles of a double-six set in ordered form, smaller number first.

0-0 0-1 0-2 0-3 0-4 0-5 0-6
1-1 1-2 1-3 1-4 1-5 1-6
2-2 2-3 2-4 2-5 2-6
3-3 3-4 3-5 3-6
4-4 4-5 4-6
5-5 5-6
6-6

Answer

0-0, 0-1, 0-2, 0-3, 0-4, 0-5, 0-6; 1-1, 1-2, 1-3, 1-4, 1-5, 1-6; 2-2, 2-3, 2-4, 2-5, 2-6; 3-3, 3-4, 3-5, 3-6; 4-4, 4-5, 4-6; 5-5, 5-6; 6-6.

Reasoning

Taking each first number in turn and pairing it only with numbers equal to or greater than itself lists every unordered pair exactly once.

Check

Count the tiles: 7 + 6 + 5 + 4 + 3 + 2 + 1 = 28.

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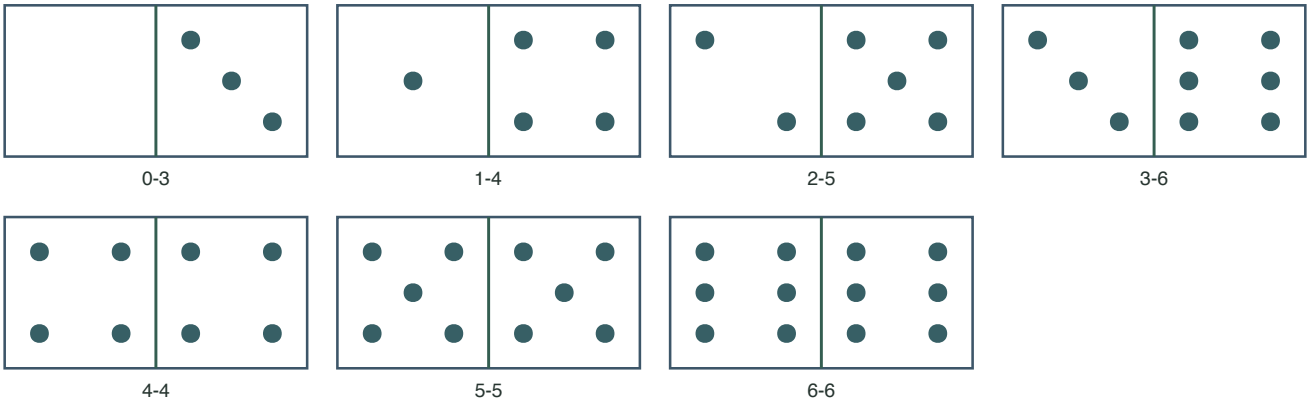
Task 4 — Visual checking: a draft sheet shows the tiles 0-3, 1-4, 2-5, 3-6, 4-4, 5-5, 6-6 and a second 3-0 tile. Identify the problem and state the correction.



Answer

The tile 3-0 is the same as 0-3, so it is a duplicate. Remove it; the sheet then has seven distinct tiles with no repeats.

Reasoning

Domino tiles are unordered pairs, so 3-0 and 0-3 are one tile, and a set must not contain the same pair twice.

Check

Rewrite each tile with the smaller number first and confirm no pair appears twice.