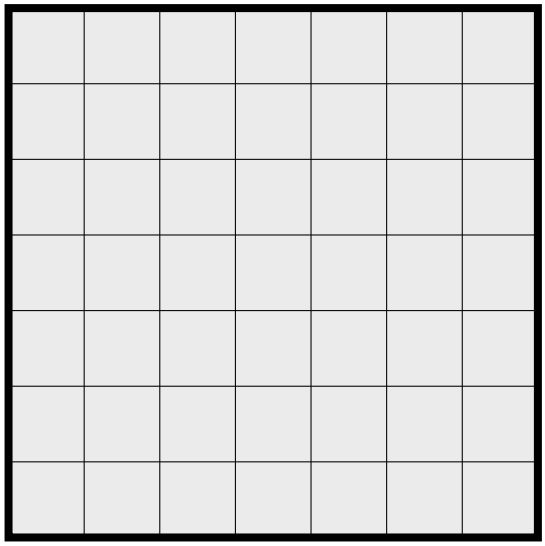
FSJM · YEAR 4 · PUZZLE 1

The chocolate box

Cut out the chocolates and try to fit as many as you can in the box

Print at actual size (100%)



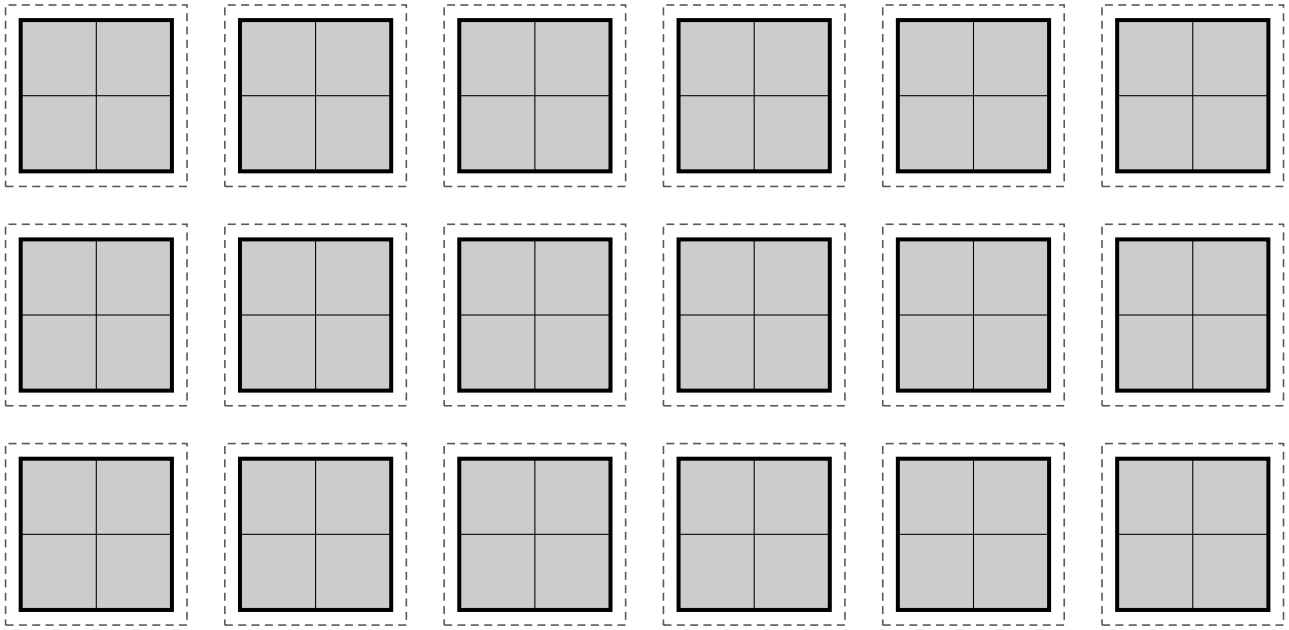
The box: 7 cm by 7 cm

Each chocolate is a square,
2 cm by 2 cm

Chocolates lie flat, in one
layer, inside the box

Can you turn a chocolate
to fit one more in?

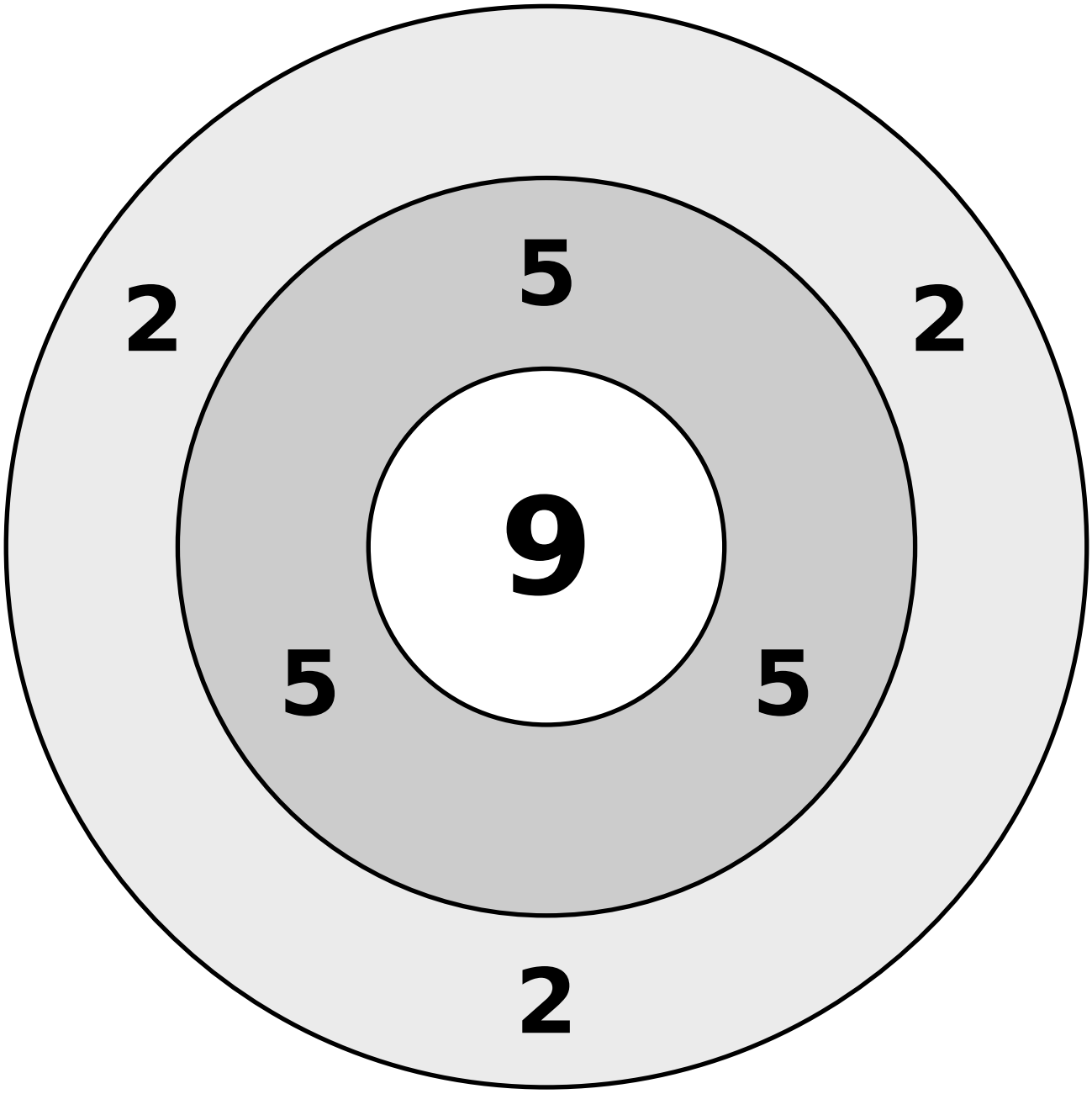
✂ Cut out the chocolates



mathscafe.net
Lorna Brown © 2026

Darts

Put counters on the target for the darts. Make 24 points with as few darts as you can



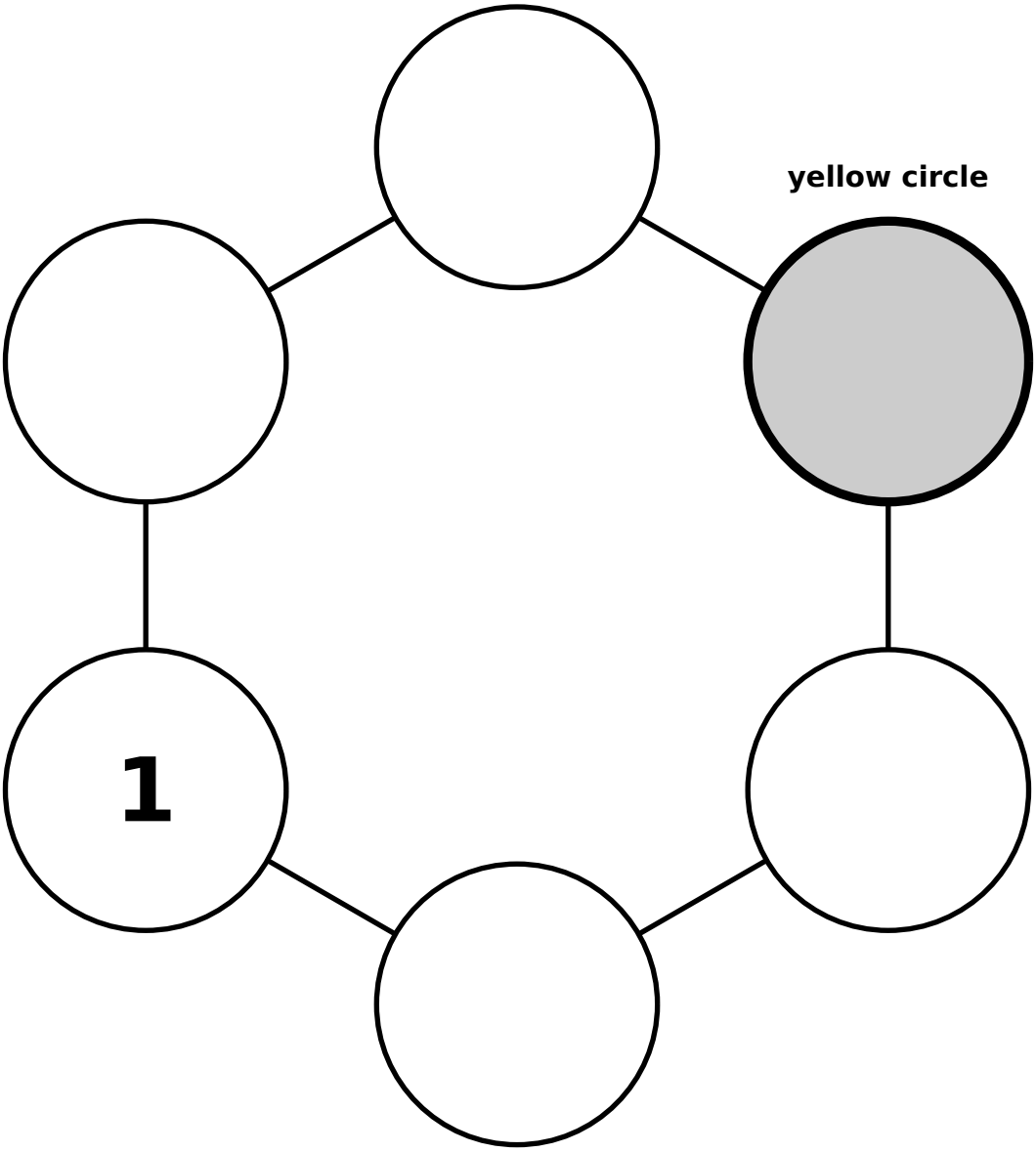
Ring scores: outer ring 2 middle ring 5 centre 9

Puzzle from the FSJM quarter-final 2024, question 2
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Sextet

Put the cards 2 to 6 in the circles. Circles next to each other must add up to 6, 7 or 8



✂ Cut out the number cards

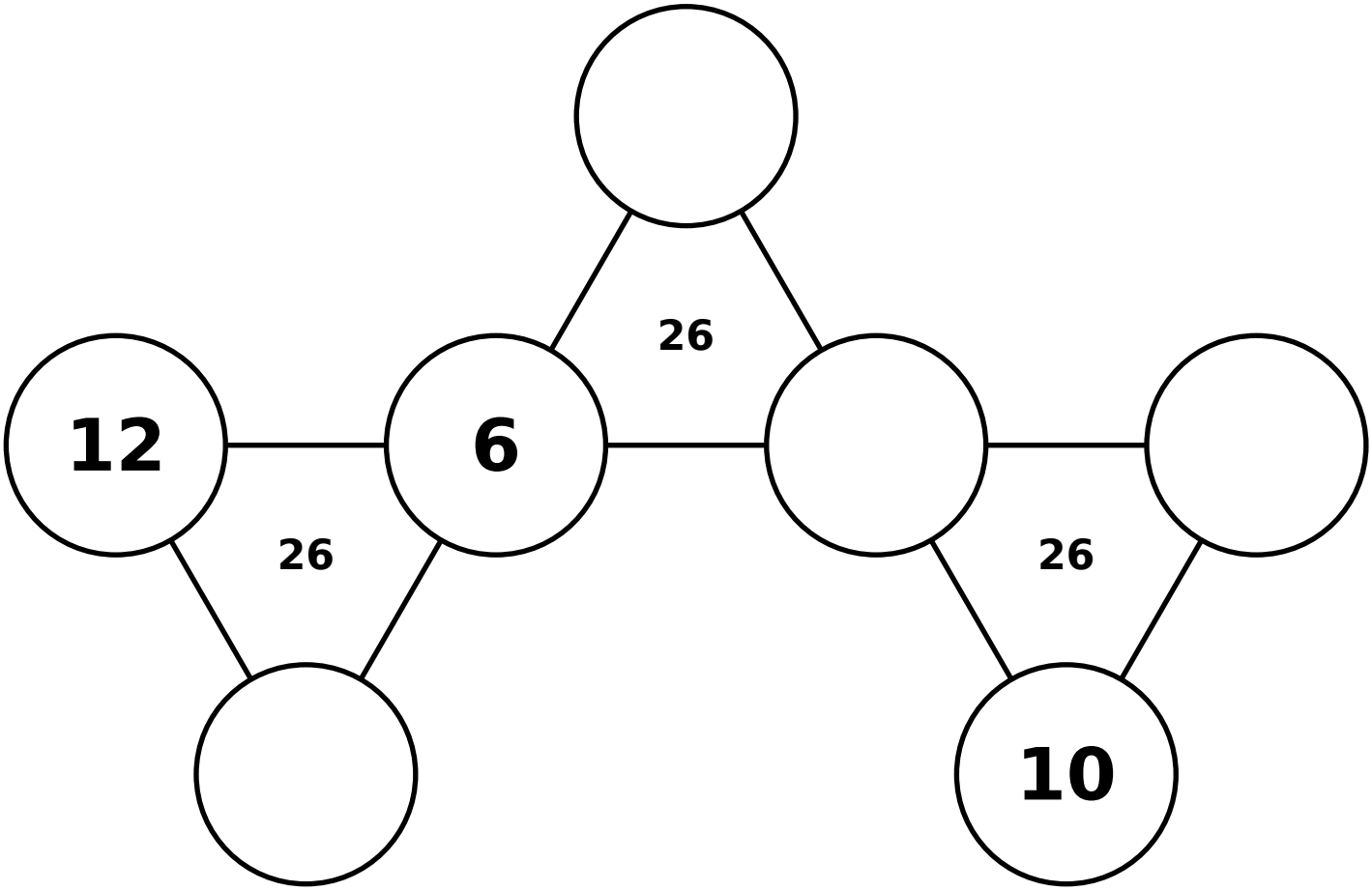
2	3	4	5	6

Puzzle from the FSJM quarter-final 2020, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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The hat of the year

The three numbers around each triangle add up to 26. Put the cards in the empty circles



✂ Cut out the number cards

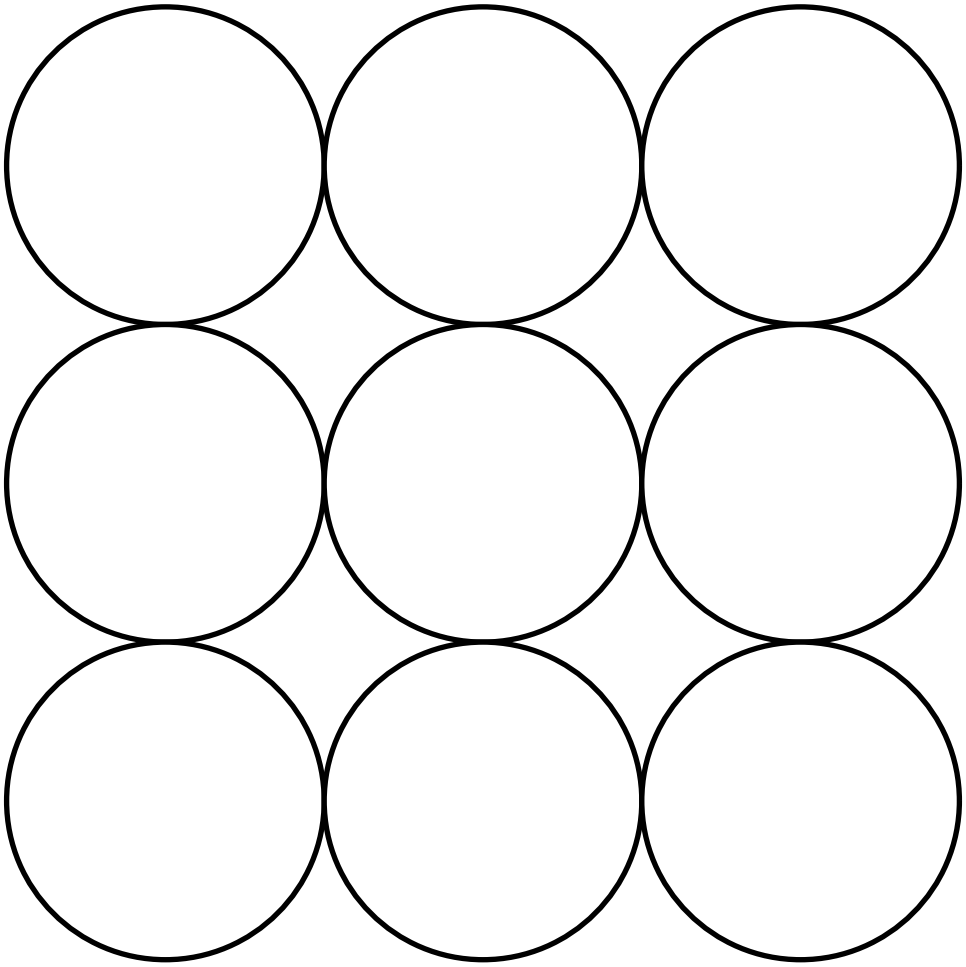
7	8	9	11

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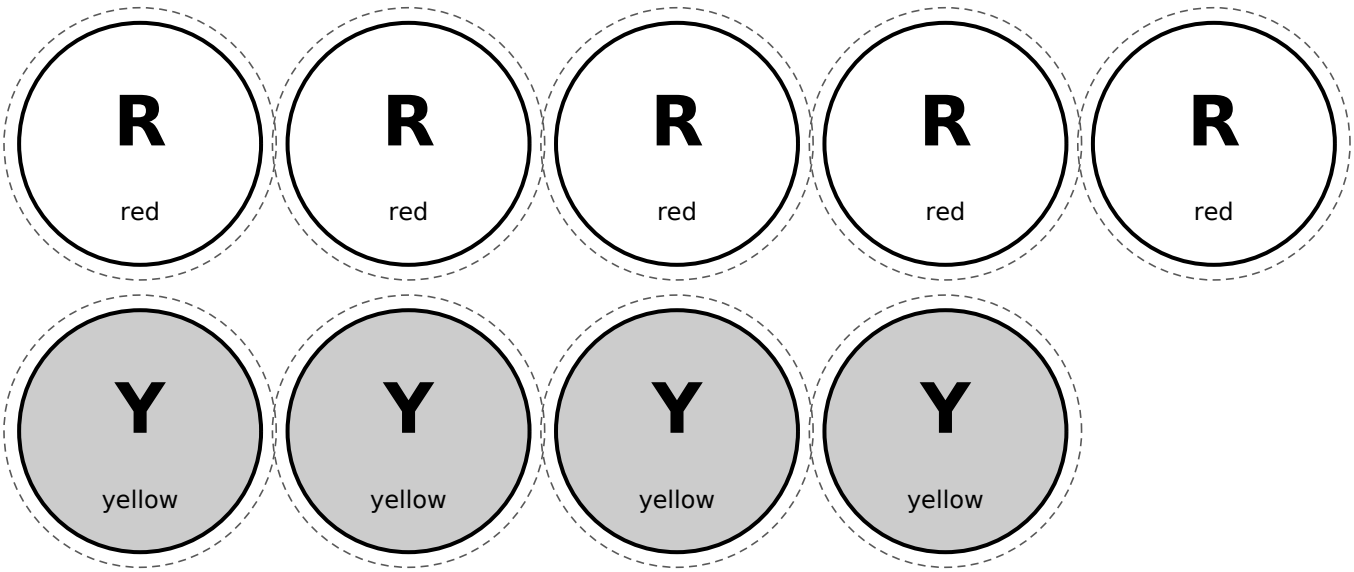
FSJM · YEAR 4 · PUZZLE 5

The stickers

One sticker on each circle. Yellows must not touch. Each red touches another red



✂ Cut out the stickers: 5 red (R) and 4 yellow (Y)

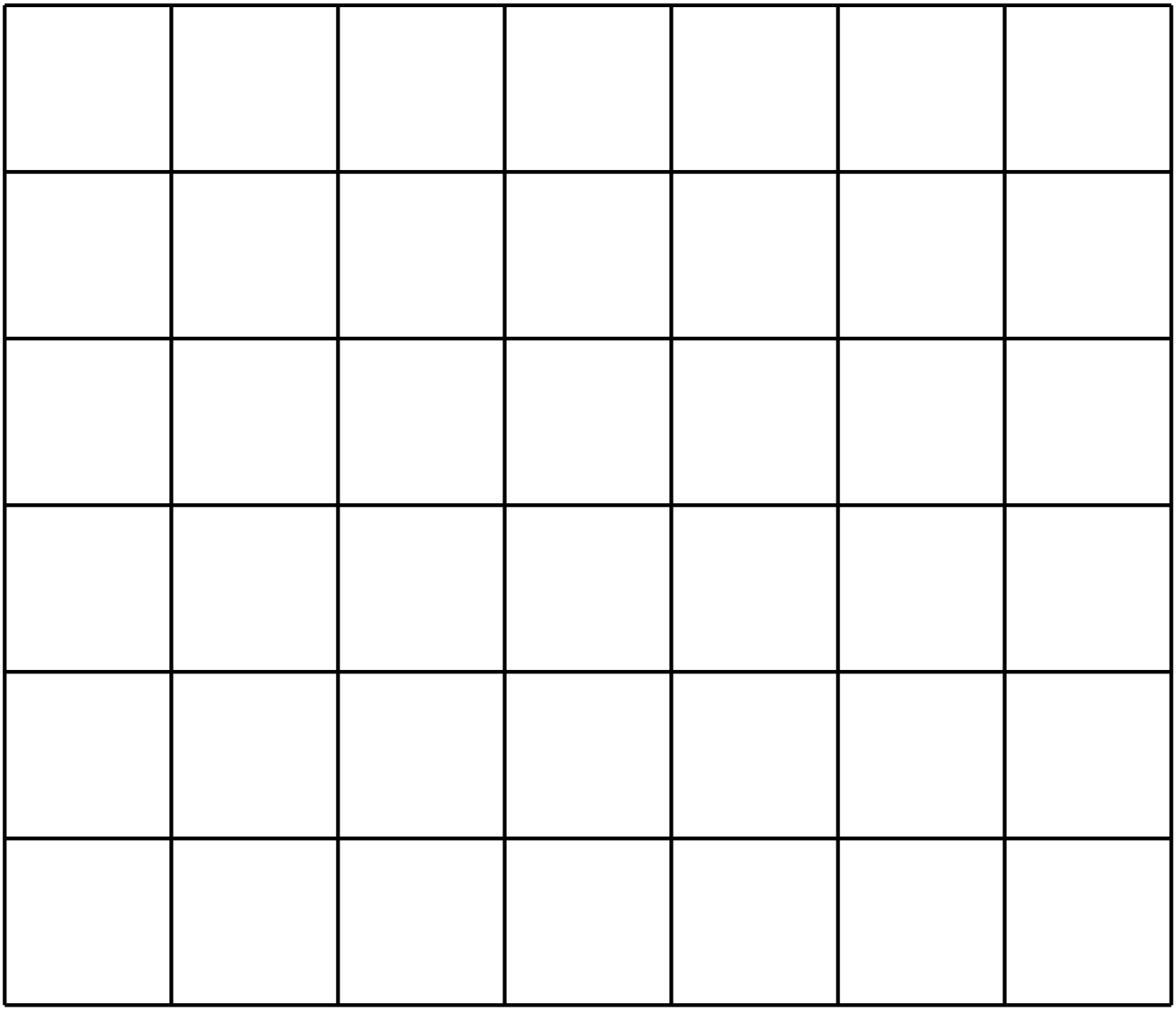


Puzzle from the FSJM quarter-final 2022, question 4
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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The grid

Put counters on squares. Counters must not touch, not even at a corner



What is the most counters you can place?

Most I found: _____

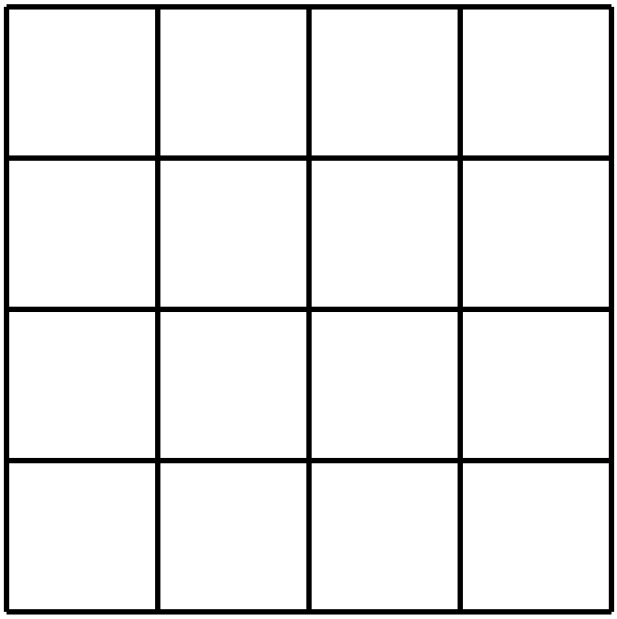
Puzzle from the FSJM quarter-final 2022, question 5
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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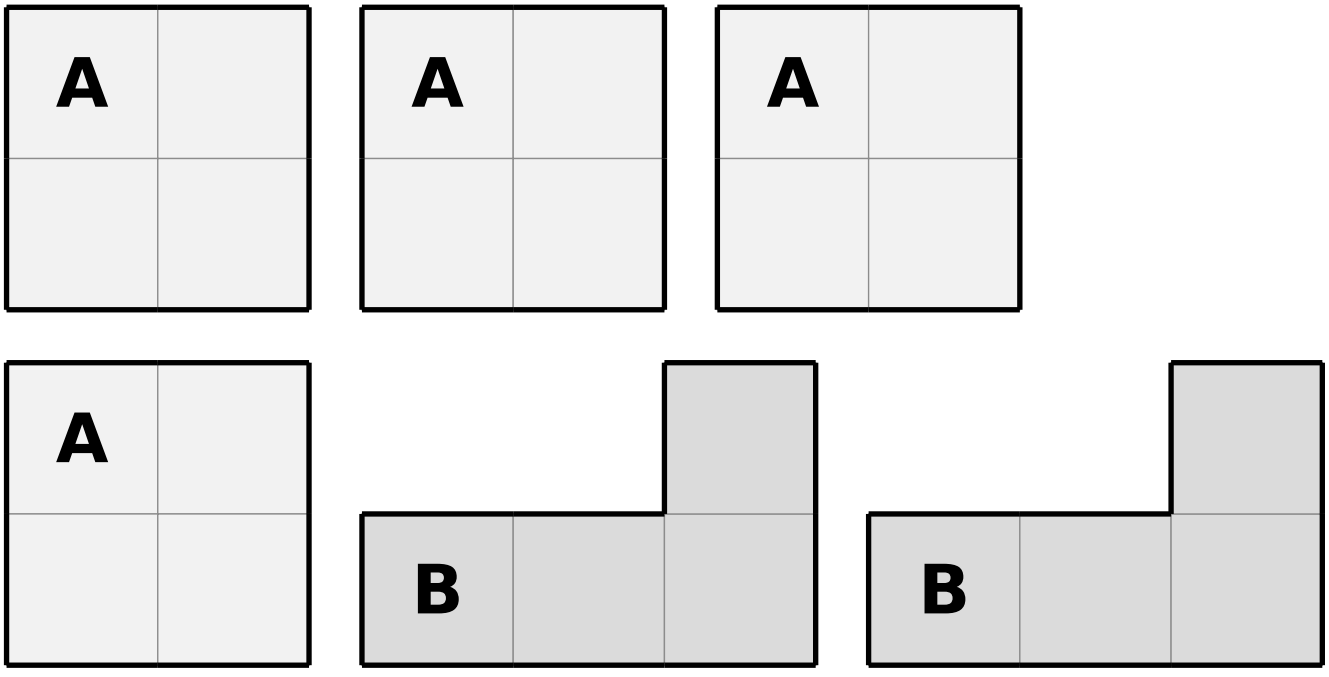
Tetrominoes

Try to cover the whole grid with four pieces that are all the same shape

Print at actual size (100%)



✂ Cut out the pieces: four of each shape A to E



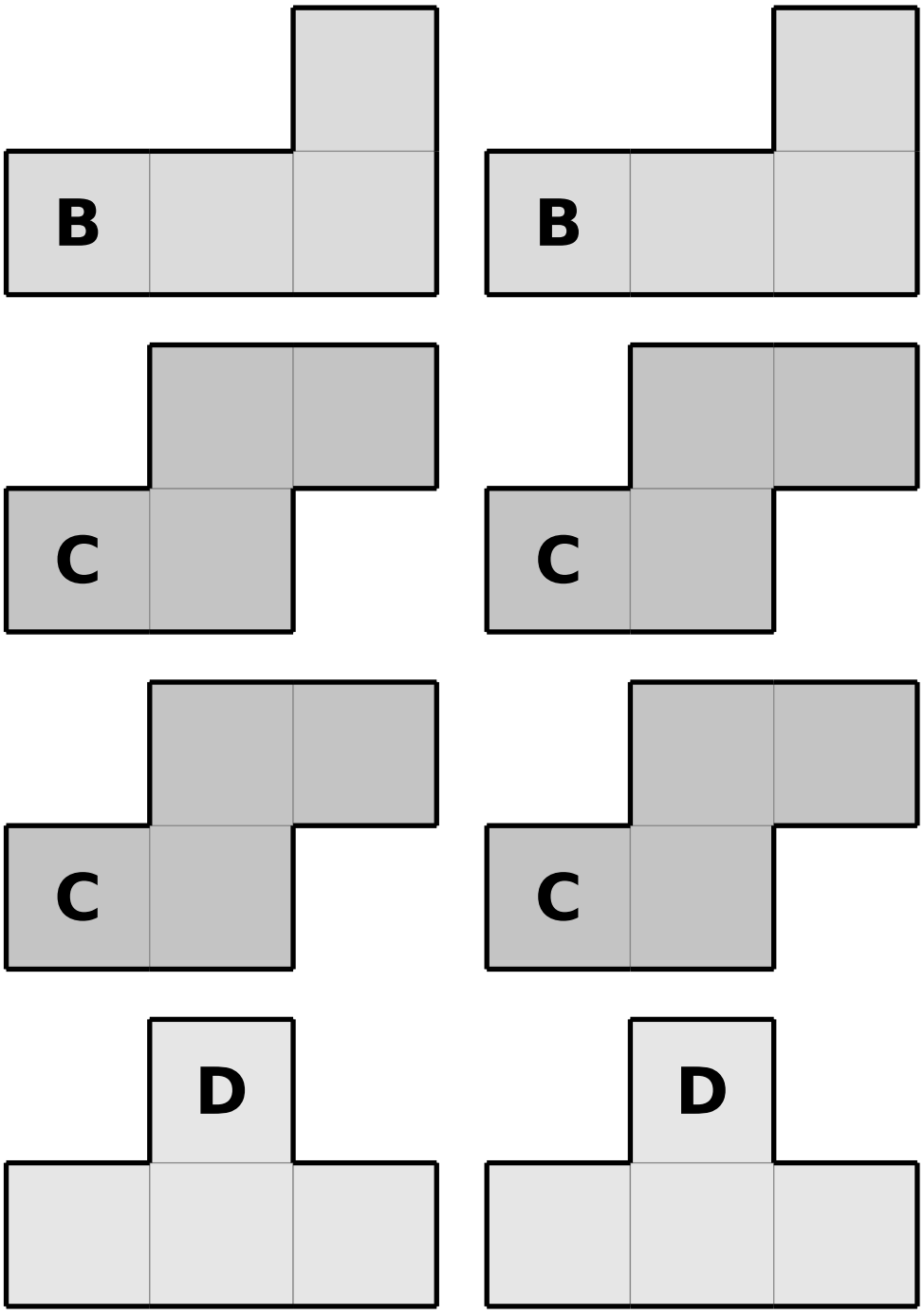
Puzzle from the FSJM quarter-final 2024, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Tetrominoes (pieces continued)

Four of each shape A to E

✂ Cut out each piece around its thick outline



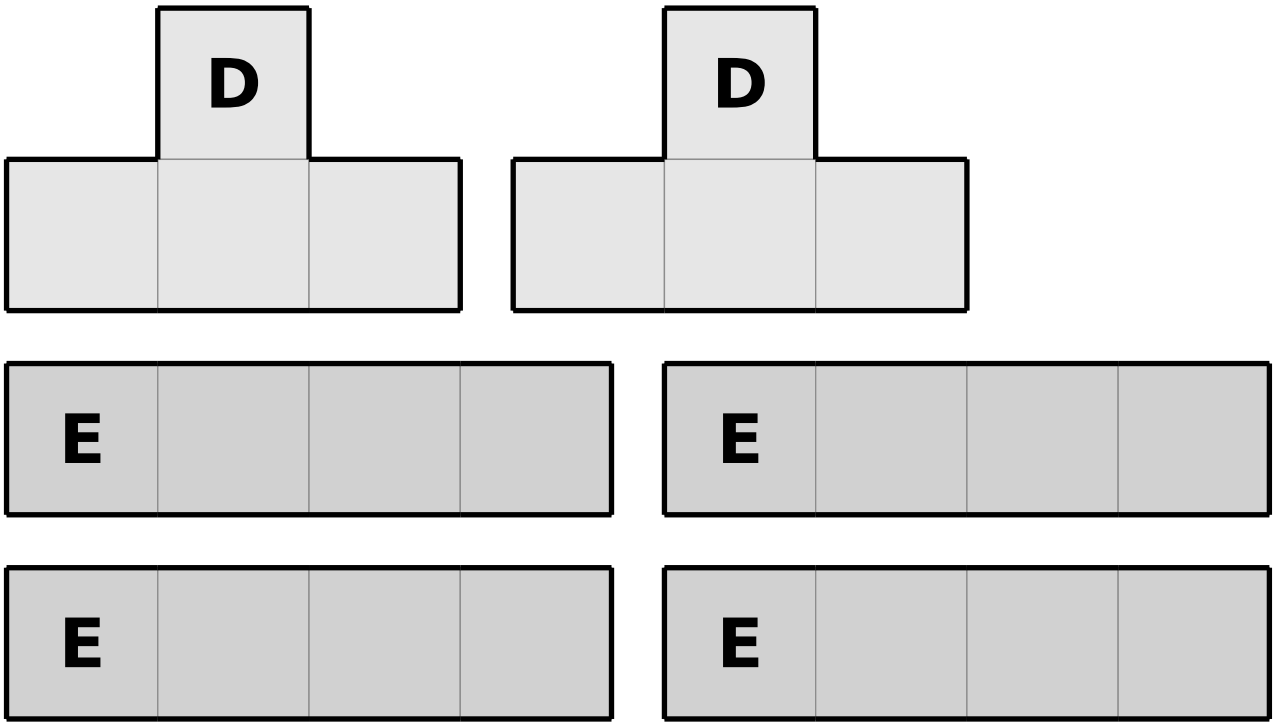
Puzzle from the FSJM quarter-final 2024, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Tetrominoes (pieces continued)

Four of each shape A to E

✂ Cut out each piece around its thick outline



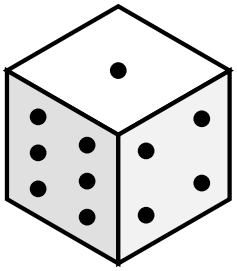
Puzzle from the FSJM quarter-final 2024, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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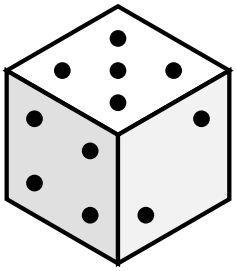
FSJM · YEAR 4 · PUZZLE 8

Matilda's dice

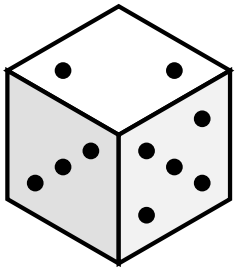
Draw dots on the net to match the three views, then fold it into a cube



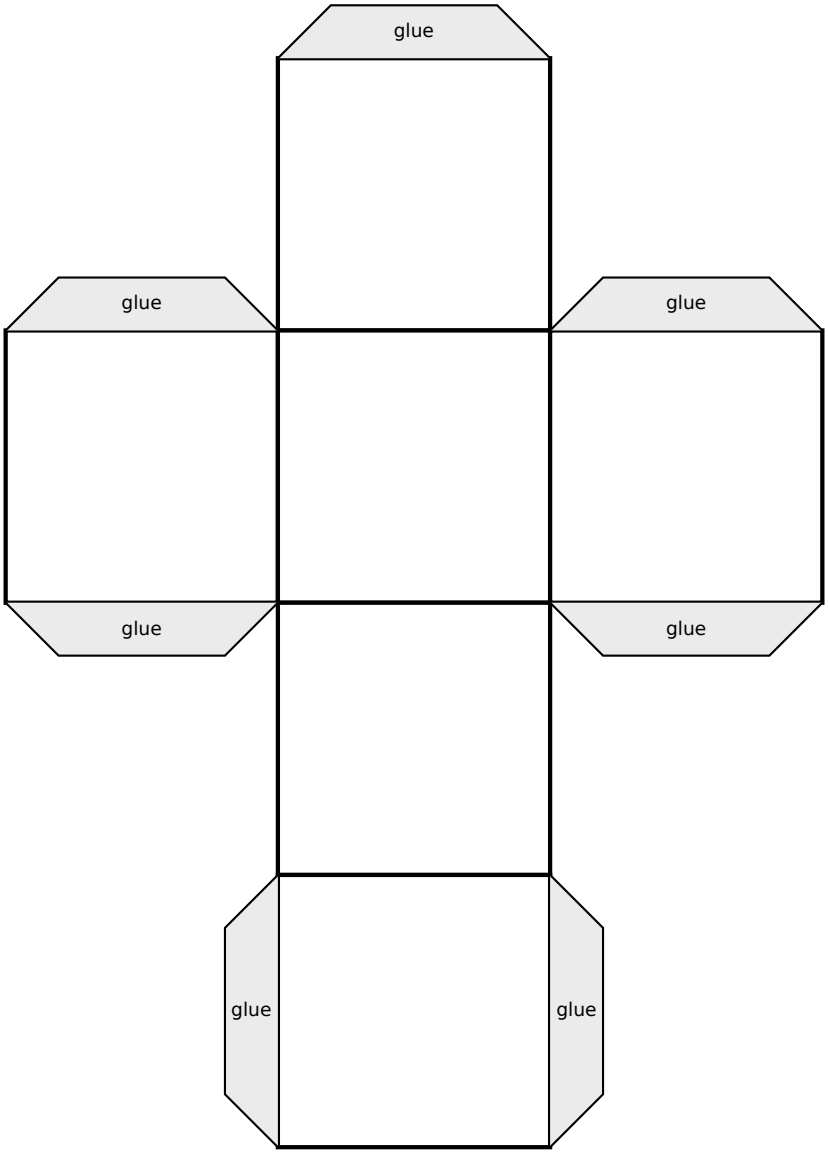
View 1



View 2



View 3



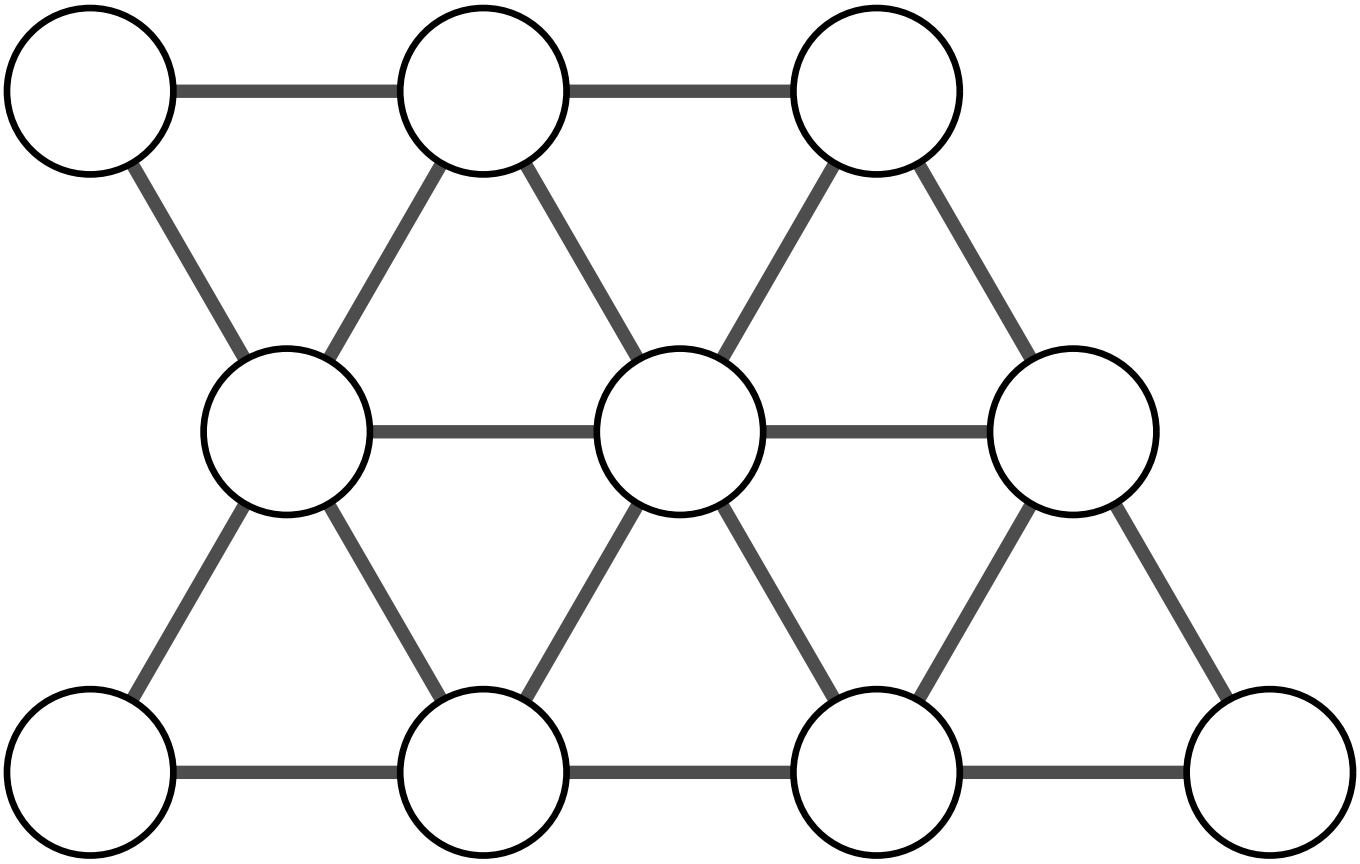
✂ Cut round the outside, fold on the lines, glue the tabs

Puzzle from the FSJM quarter-final 2020, question 4
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Traffic cameras

Put counters on junctions for cameras. Every junction must be watched



A camera watches its own junction and every junction joined to it by a street

What is the fewest cameras you need?

Fewest I found: _____

Puzzle from the FSJM quarter-final 2020, question 5
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

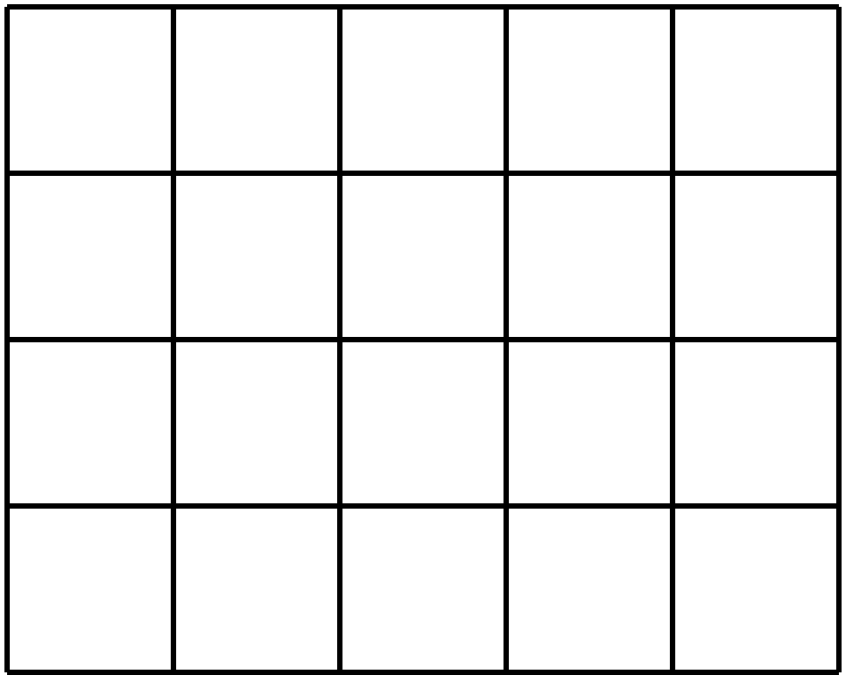
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FSJM · YEAR 4 · PUZZLE 11

Pentominoes

Four of the five pieces cover the whole grid. You can turn and flip the pieces

Print at actual size (100%)



Which piece is not used? _____

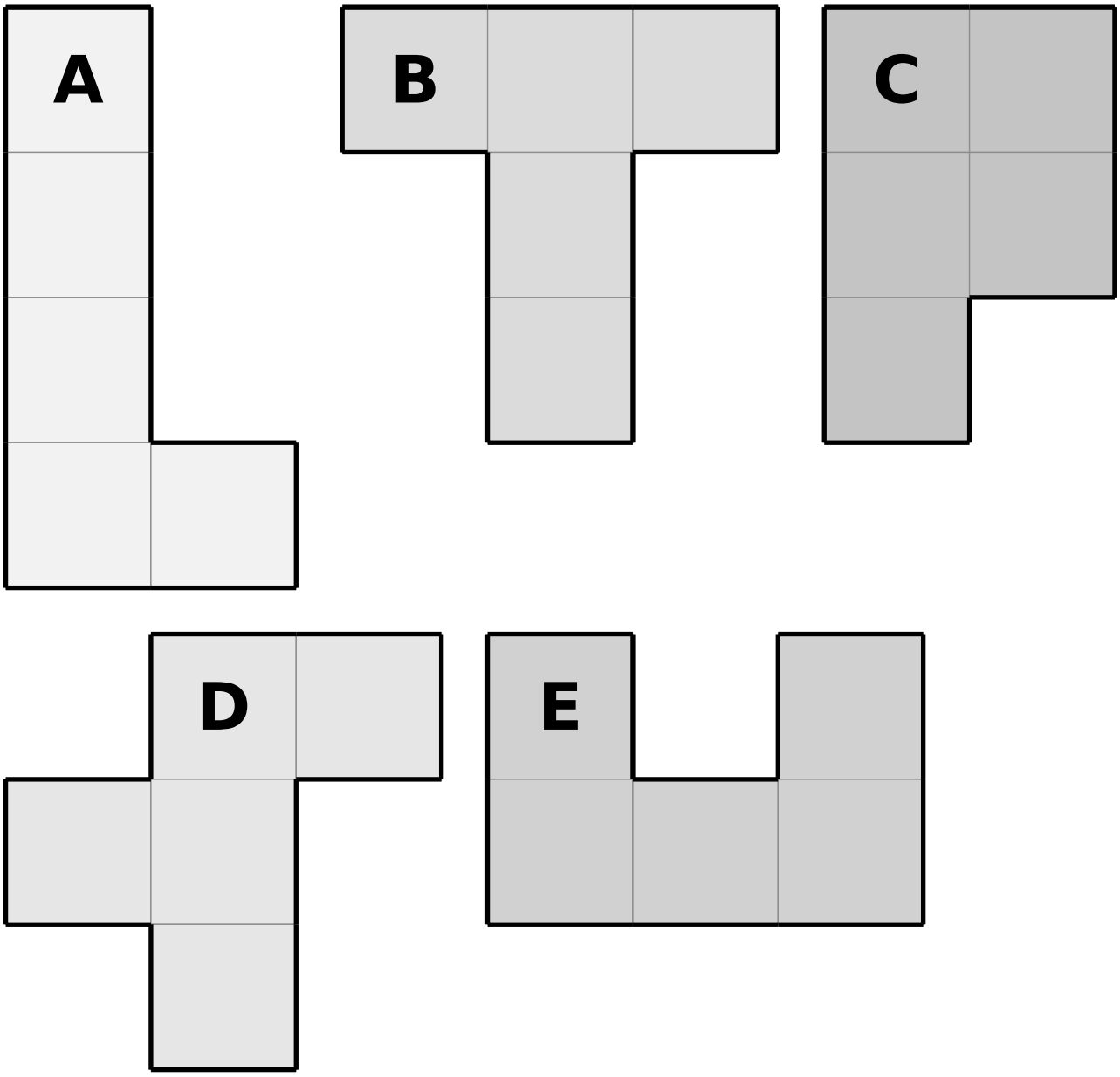
Made for your pentomino set, in the style of FSJM quarter-final 2023, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Pentominoes: the pieces

Cut out pieces A to E

✂ Cut out each piece around its thick outline



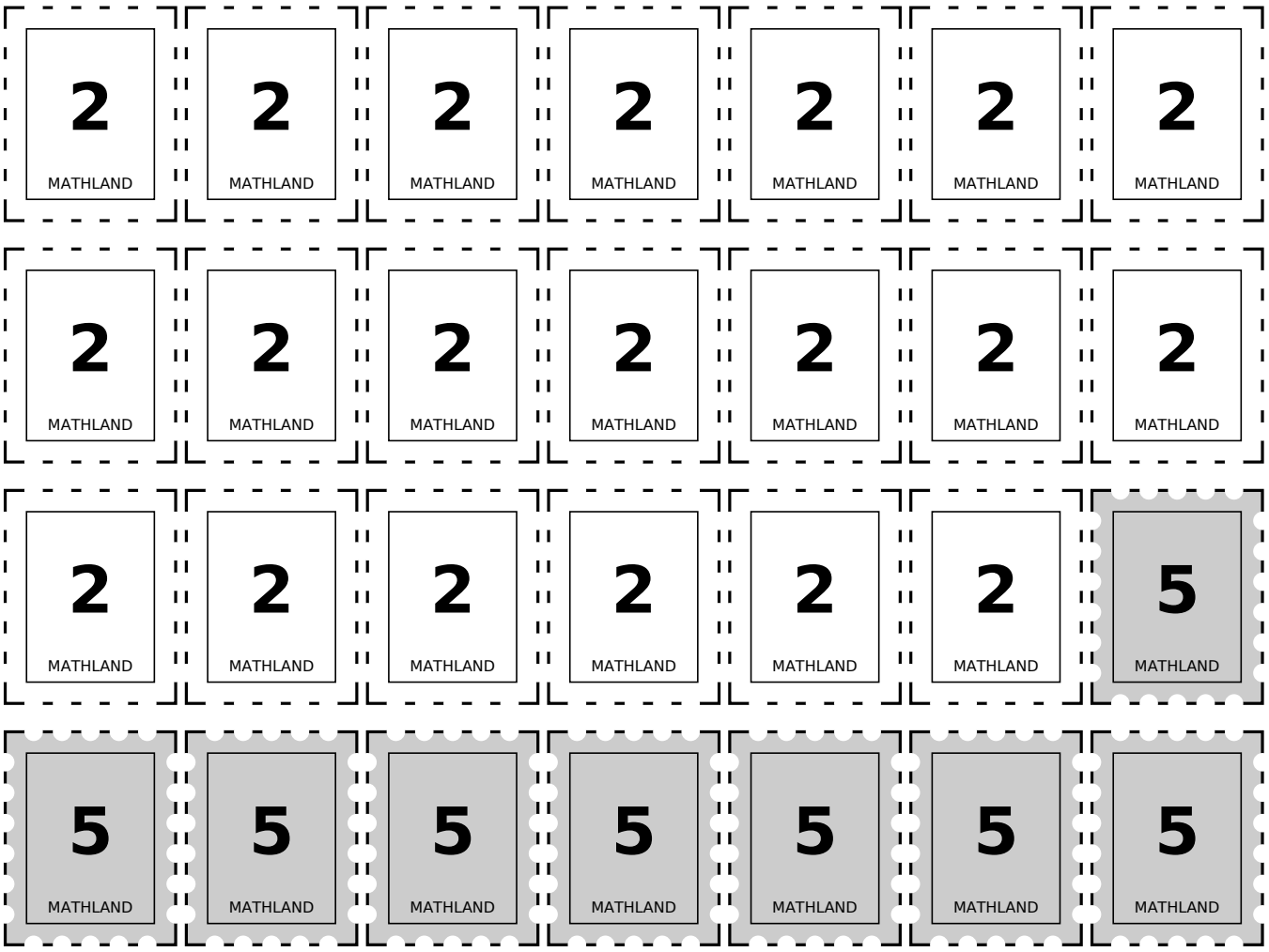
Made for your pentomino set, in the style of FSJM quarter-final 2023, question 1
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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Stamps

Use 2 stamps and 5 stamps to make exactly 41. Find as many ways as you can

✂ Cut out the stamps: 20 stamps of 2 and 8 stamps of 5



My ways to make 41:

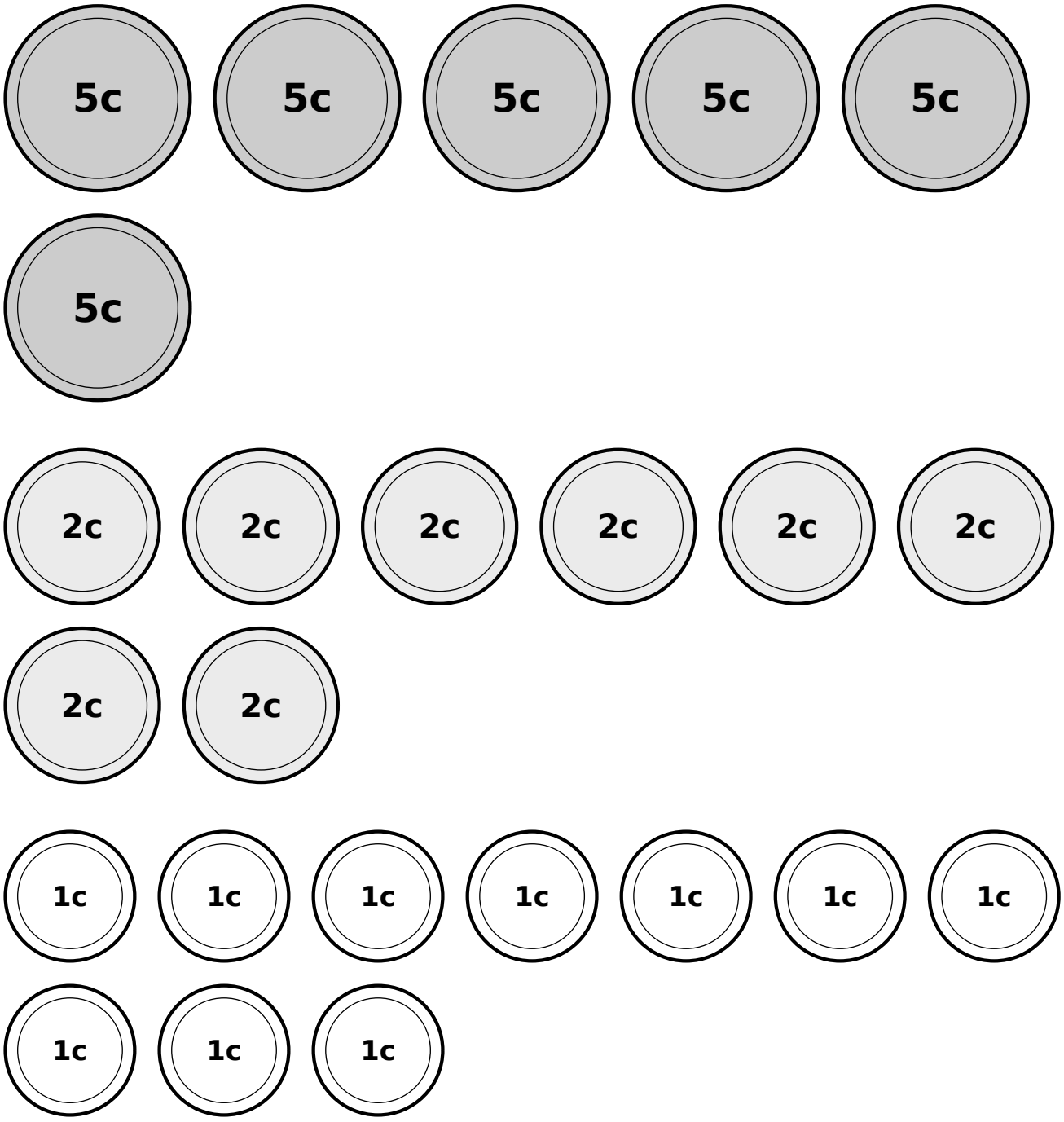
Puzzle from the FSJM quarter-final 2023, question 2
FSJM: Fédération Suisse des Jeux Mathématiques, fsjm.ch

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The piggy bank

Make 26 cents with as few coins as you can. Use at least one of each coin

✂ Cut out the coins



Fewest coins I found: _____

Puzzle from the FSJM quarter-final 2026, question 3
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Sweets

Share 24 sweets so every clue is true. Everyone has at least one sweet

✂ Cut out the name cards and the 24 sweets

Alice

6 times as many as Chloe

Bernard

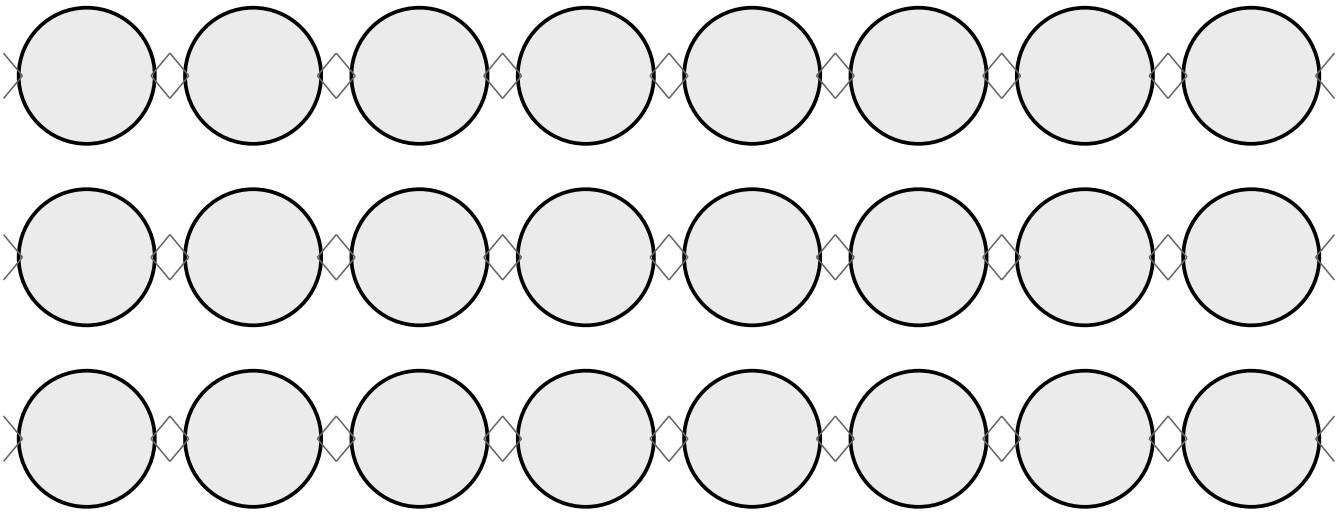
2 times as many as Damian

Chloe

?

Damian

?



Puzzle from the FSJM quarter-final 2024, question 4
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Two dates

Make the last date in 2025 you can with these 12 cards

Day

Month

Year

✂ Cut out the digit cards: two each of 0, 1, 2, 3, 4 and 5

0	0	1	1	2	2
3	3	4	4	5	5

Puzzle from the FSJM quarter-final 2025, question 1
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