

Geometric Puzzling

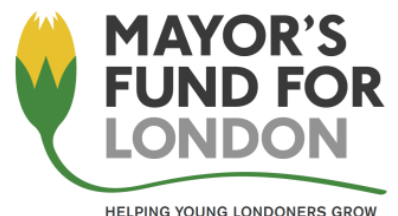
**Domino, Soma Cube, Pentomino,
Coins & Matchstick Puzzles**

Printable Activity Cards



info@themathszone.co.uk

JACK PETCHEY FOUNDATION
**COUNT ON
US** Secondary Maths
Challenge
WITH MAYOR'S FUND FOR LONDON



Geometric Puzzle Cards

This booklet contains printable puzzle cards that were used in the 2018 Mayor's Fund for London Secondary Challenge. They were designed for tournament use, but are nonetheless just a large collection of geometric puzzles that can be used in a variety of formats. Most were adapted from freely available resources on the internet, although all are standard types.

These can be printed onto labels and then stuck onto commercially available blank playing cards. They print onto Avery L7164 A4 format labels.

There are two sets:

1. All of the cards used in the heats and semi finals.
2. All of the cards, as a numbered set, used in the 2018 final.

They are designed to be used with physical examples of the puzzles:

- A standard set of dominoes.
- A set of 12 pentomino pieces.
- A soma cube.
- Coins (or counters) and matchsticks (e.g. headless ones for craft use)

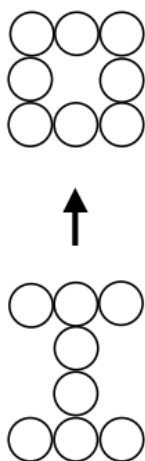
For tournament use, teams of 3 worked together to solve a set of 4 cards one of each type (Domino, Pentomino, Soma Cube, Coins/Matches). They had one set of equipment as above. When a puzzle was solved, the solution was demonstrated to a judge at the table. If correct it was recorded, if not, they continued. A replacement card of any type could then be given. If at any stage a puzzle was given up on a replacement card could be given.

The cards were supplied from a central desk where a queue would form which effectively discouraged giving up too easily. Teams replaced as many cards as they wanted at a time, but always remained with 4 cards in play.

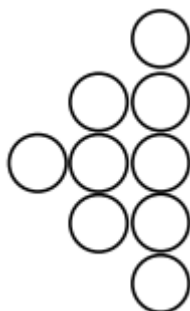
Domino puzzles require the dominoes from the set to be placed in a rectangle pattern. The puzzle is to work out which way round the dominoes go in the rectangle. The number in the puzzle rectangle is the number of spots needed on the domino piece and a blank space in the rectangle is indeed a blank on the domino.

The puzzles can be used in tournament style or just used as an independent resource. No solutions are given with this pack. With puzzles of this type it is clear if they are correct and giving the solutions makes it too tempting to look through them to work out how it is done. This is NOT puzzling! With the equipment the puzzle instructions on the card are sufficient, no questions or clarifications should be needed or given. Never give up! If you cannot solve a puzzle, stop and come back to it later. Never look up the solution.

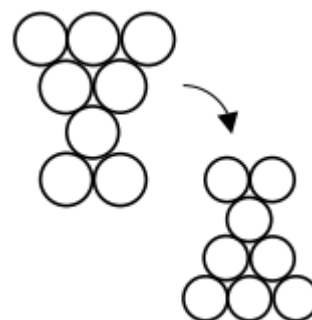
Change 1 into 2 in 4 moves.



Change the triangle into a square in 2 moves.



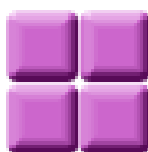
Change 1 into 2 in 2 moves



Place 3 dice in a line on the table. Make the total of the top three equal to five more than the total of the bottom three.



Place 4 dice in a square on the table. Make the sum of the top and bottoms totals equal to the total around the sides.



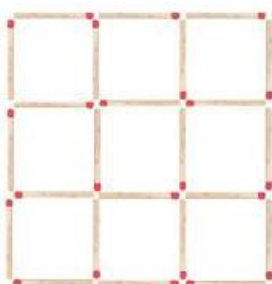
Place 4 dice in a line on the table. Make the total of the top four equal to four more than the total of the bottom four.



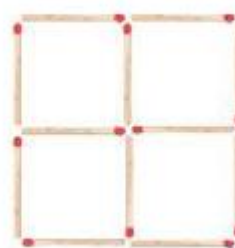
Move three matchsticks to make two squares.



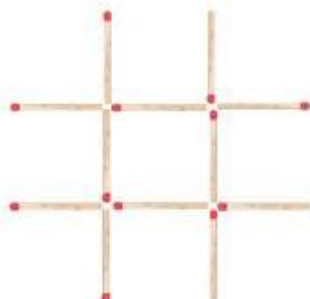
Leave just two squares by removing eight matchsticks.



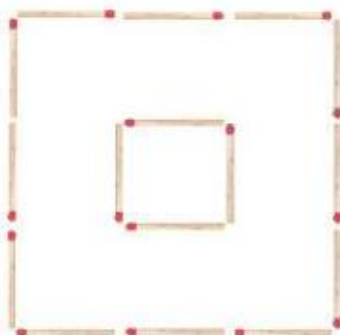
Leave just two squares by removing two matchsticks.



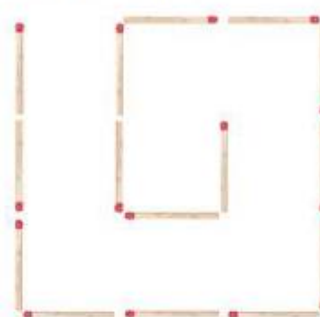
Move three matchsticks to make three squares.



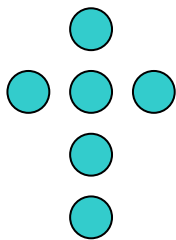
Move four matchsticks to make three squares.



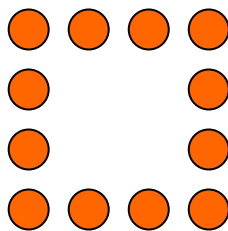
Move three matchsticks to make two squares.



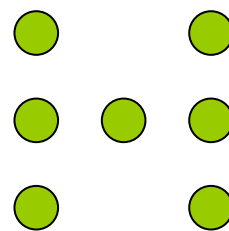
Move one of these coins to make two rows with 4 coins in each row.



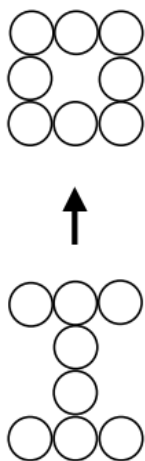
Move 4 of these coins to make four rows with five coins in each row.



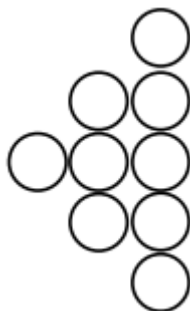
Add two more coins to make ten rows with three coins in each line.



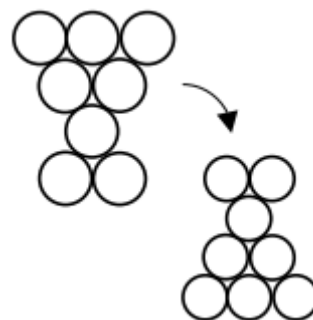
Change 1 into 2 in 4 moves.



Change the triangle into a square in 2 moves.



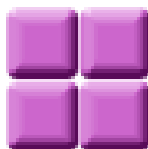
Change 1 into 2 in 2 moves



Place 3 dice in a line on the table. Make the total of the top three equal to twice the total of the bottom three.



Place 4 dice in a square on the table. Make the total of the top four a square number with numbers not all the same.



Place 4 dice in a line on the table. Make the total of the top four equal to three times the total of the bottom four.



Place 3 dice in a line on the table. Make the total of the top three equal to 3 more than the total of the bottom three.



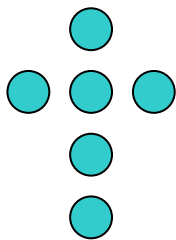
Place 4 dice in a line on the table. Make the total of the top four equal to two more than the total of the bottom four.



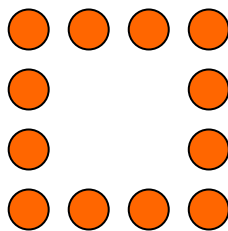
Place 4 dice in a line on the table. Make the total of the top four equal to ten more than the total of the bottom four.



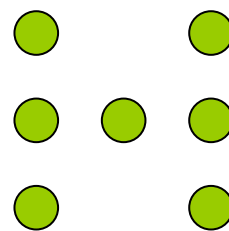
Move one of these coins to make two rows with 4 coins in each row.



Move 4 of these coins to make four rows with five coins in each row.



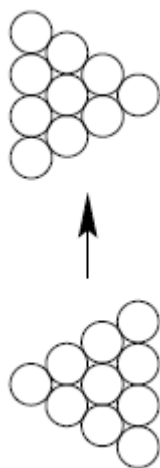
Add two more coins to make ten rows with three coins in each line.



Change 1 into 2 in 3 moves.



Change 1 into 2 in 3 moves.



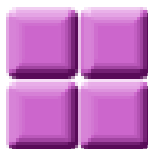
Change 1 into 2 in 3 moves.



Place 3 dice in a line on the table. Make the total of the top three equal to twice the total of the bottom three.



Place 4 dice in a square on the table. Make the total of the top four a square number with numbers not all the same.



Place 4 dice in a line on the table. Make the total of the top four equal to three times the total of the bottom four.



Place 3 dice in a line on the table. Make the total of the top three equal to 3 more than the total of the bottom three.



Place 4 dice in a line on the table. Make the total of the top four equal to two more than the total of the bottom four.



Place 4 dice in a line on the table. Make the total of the top four equal to ten more than the total of the bottom four.



Dominoes

4		6	2	
4	6	1	5	5
1	5	2	1	4
3	4	3	3	2
4	4	2	3	1
5	4	5	1	6

Dominoes

5	1	3	4	6
3	6	5	5	3
6	5	1	5	4
2		3	4	2
4	4	2	2	1
4	5	5	1	6

Dominoes

6	4	1	3	5
4	4	4	6	
		1	5	5
5		4		2
1	1	6	2	3
1	6	5	4	3

Dominoes

1	1	5	1	
1	2	5		5
6	1			6
6	2	6		3
1	2	2	6	5
3	4	4		4

Dominoes

3	1	1	2	
4	6	5		5
3	5		3	
2	2	1	1	5
	6	3	1	6
4	3	2	1	6

Dominoes

	1	1		5
1	2	1		5
4	3	6	4	1
5	6	5	1	5
2	6		3	4
3	2		3	6

Dominoes

4	4	4	2	2
6	2		5	2
5	3	1	1	4
2		6	3	3
	1	1	6	2
6	4	2	6	5

Dominoes

1	3	6	3	2
5	4	4		1
4	6	1	1	5
5	1	2	6	6
3	3	2		5
5		1	4	5

Dominoes

5	6	5	6	1
6	6	5	6	3
	2		4	
3	4	3	5	1
4	1	5	1	2
4	4	5	3	2

Dominoes

6	6	2	2	3
	5	5	3	1
	2	1	6	
5	5	4	2	2
4	3	1	5	1
4	4	6	2	5

Dominoes

2		5	1	4
3	2	5	1	2
	3	6	1	2
1	1	2	6	
6	5	5	3	2
5	4	4	4	5

Dominoes

5	6	6		4
6	6	1	1	1
3			1	1
1	3	5	5	5
1	3	5	2	4
6	5	4	5	4

Dominoes

1	6	1	2
0	5	0	5
4	0	5	6
4	4	1	4
2	5	6	6

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

1	4	4	2
3	3	2	2
3	6	3	2
2	4	6	4
1	1	2	6

Dominoes

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

Dominoes

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

Dominoes

3	1	6	6
2	5	4	1
6	1	6	1
4	4	1	5
4	3	6	5

Dominoes

5	5	3	1
5	1	6	6
3	5	3	0
1	6	3	0
6	2	3	1

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

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

Dominoes

6	0	4	5
5	5	0	5
0	2	2	3
3	4	0	5
5	2	4	0
4	3	6	5

Dominoes

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

Dominoes

2	4	0	6
2	2	0	4
2	0	0	4
6	4	1	1
6	4	5	6
1	2	4	1

Dominoes

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

Dominoes

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

Dominoes

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

Make a
pentomino
rectangle 7×5

Make a
pentomino
rectangle 8×5

Make a square
out of
pentominoes

②

Make a 6×5
rectangle with 6
pentominoes

Make a 7×5
rectangle with 7
pentominoes

Make a 8×5
rectangle with 8
pentominoes

②

Make a 9×5
rectangle with 9
pentominoes

Make a 10×5
rectangle with
10 pentominoes

Make an 11×5
rectangle with
11 pentominoes

②

②

③

Make a 12×5
rectangle with
12 pentominoes

Make a 10×3
rectangle with 6
pentominoes

Make a 15×3
rectangle with
12 pentominoes

③

②

③

Make a 20×3
rectangle with
12 pentominoes

③

Make a 4×10
rectangle with 8
pentominoes

③

Make a 4×15
rectangle with
12 pentominoes

③

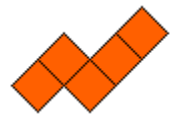
Use 4 pentominoes
to make a double
sized:



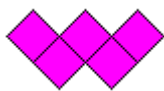
Use 4 pentominoes
to make a double
sized:



Use 4 pentominoes
to make a double
sized:



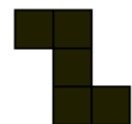
Use 4 pentominoes
to make a double
sized:



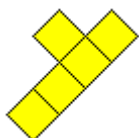
Use 4 pentominoes
to make a double
sized:



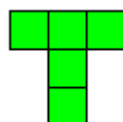
Use 4 pentominoes
to make a double
sized:



Use 4 pentominoes
to make a double
sized:

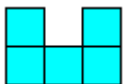


Use 4 pentominoes
to make a double
sized:



Make any
rectangle using
7 pentominoes

Use 4 pentominoes
to make a double
sized:



Make any
rectangle with 6
pentominoes

Make any
rectangle with 8
pentominoes

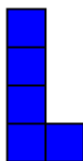
②

Use 9 pentominoes
to make a triple
sized:



③

Use 9 pentominoes
to make a triple
sized:



③

Use 9 pentominoes
to make a triple
sized:



③

Use 9 pentominoes
to make a triple
sized:



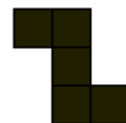
③

Use 9 pentominoes
to make a triple
sized:



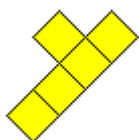
③

Use 9 pentominoes
to make a triple
sized:



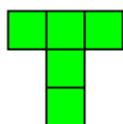
③

Use 9 pentominoes
to make a triple
sized:



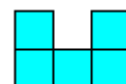
③

Use 9 pentominoes
to make a triple
sized:



③

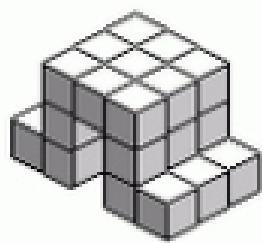
Use 9 pentominoes
to make a triple
sized:



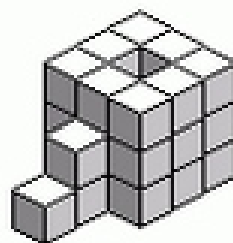
③



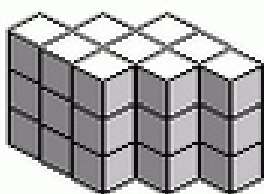
④



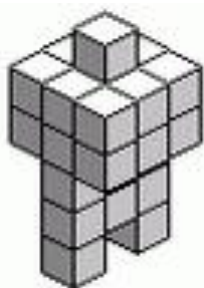
④



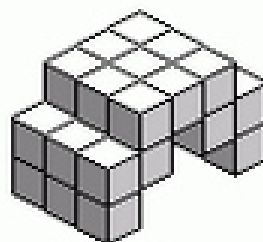
④



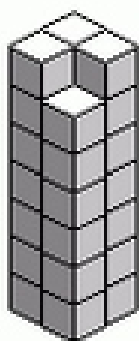
④



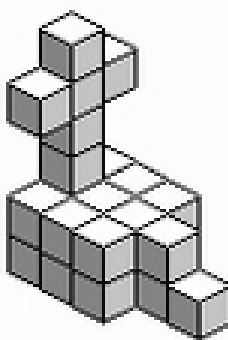
④



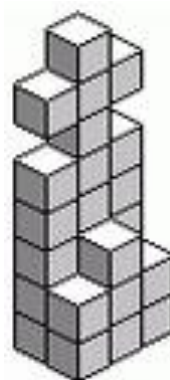
④



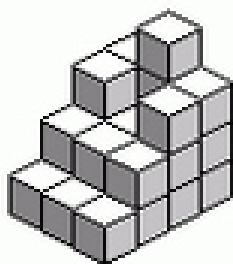
④



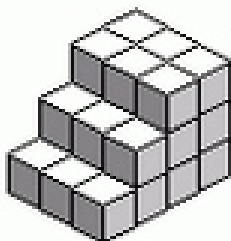
④



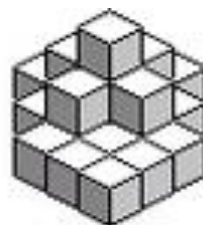
④



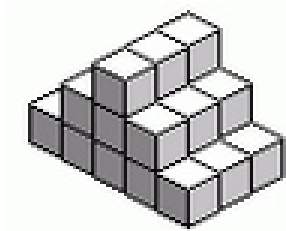
④



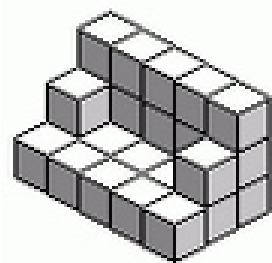
④



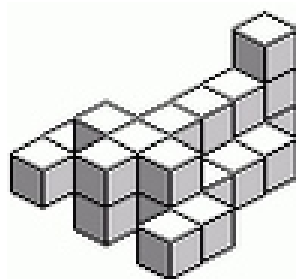
④



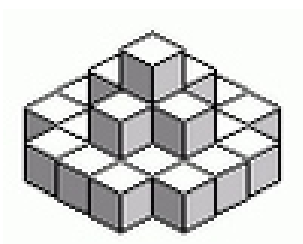
④



④



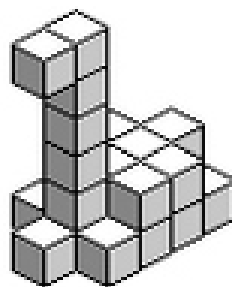
④



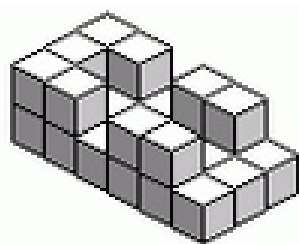
④



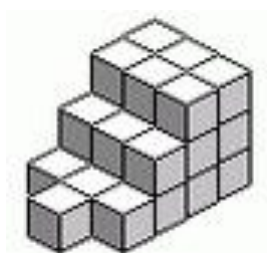
④



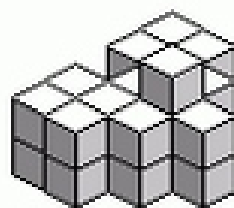
④



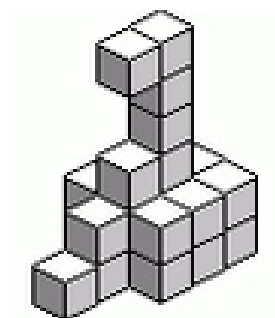
④



④



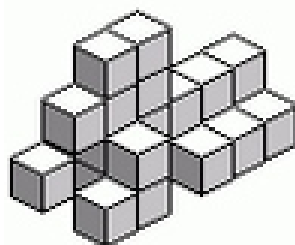
④



④

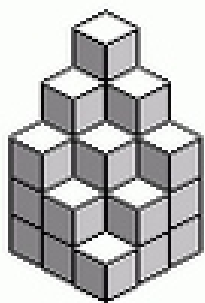


④

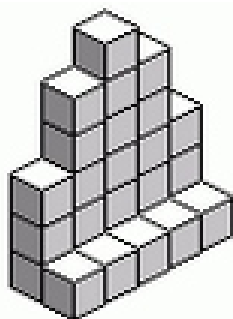


④

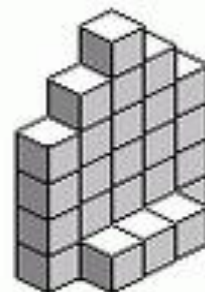
④



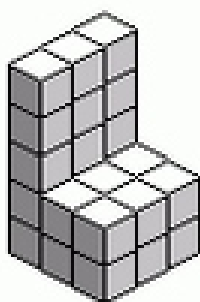
④



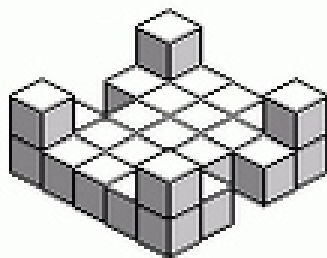
④



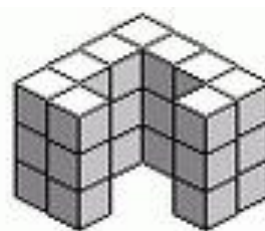
④



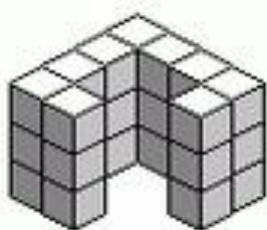
④



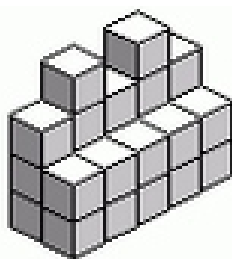
④



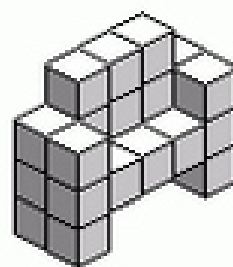
④



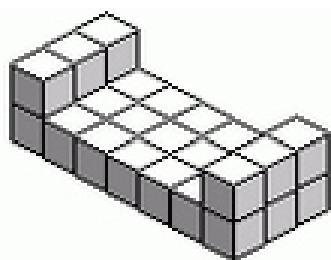
④



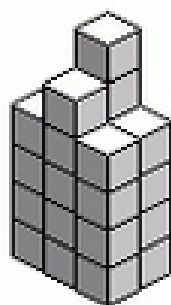
④



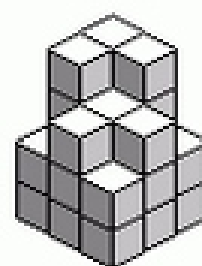
④



④

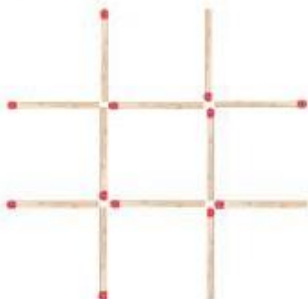


④



④

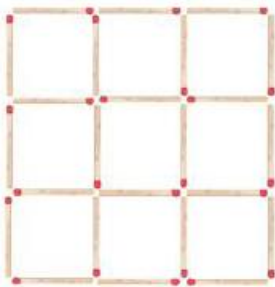
Move three matchsticks to make three squares.



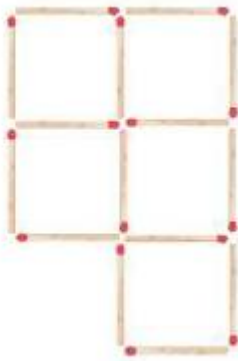
Move three matchsticks to make two squares.



Leave just two squares by removing eight matchsticks.



Leave just three squares by removing three matchsticks.



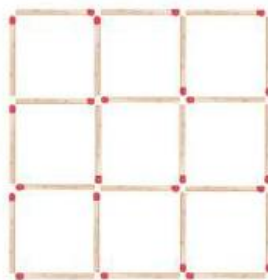
Move three matchsticks to make four squares.



Move two matchsticks to make four squares.



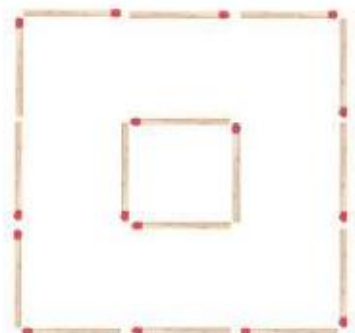
Leave just six squares by removing eight matchsticks.



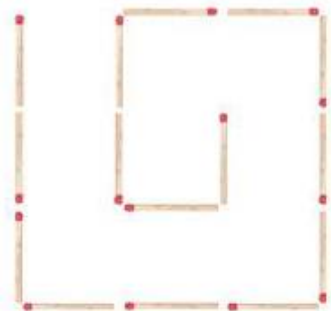
Leave just two squares by removing two matchsticks.



Move four matchsticks to make three squares.



Move three matchsticks to make two squares.



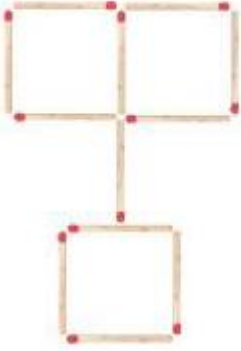
Leave just two squares by removing eight matchsticks.



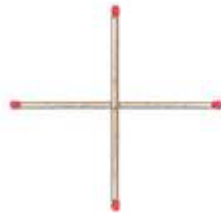
Leave just three squares by removing five matchsticks.



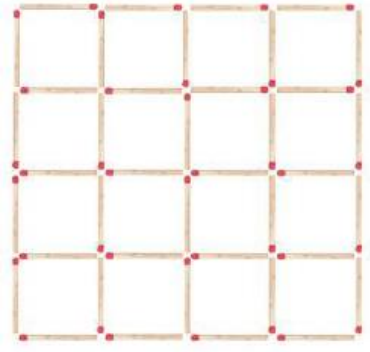
Move six matches to make five squares.



Move one matchstick to make a square.



Remove 9 matchsticks leaving no square of any size.



Take one away from seven matchsticks, then move two to leave zero.



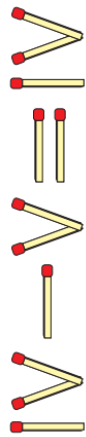
Take away six matchsticks from the fifteen shown to leave ten.



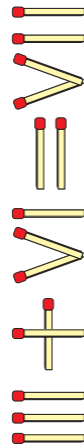
Move two matchsticks to make six squares.



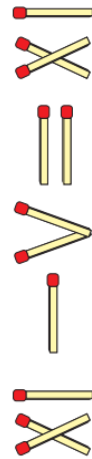
Move exactly one match to make the equation



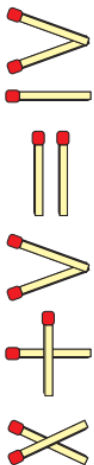
Move exactly one match to make the equation



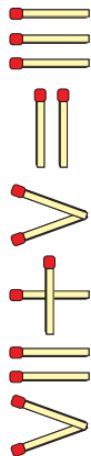
Move exactly one match to make the equation



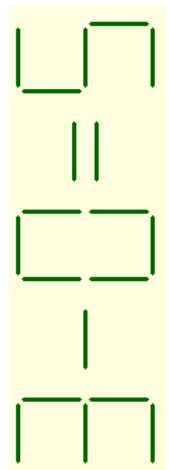
Move exactly one match to make the equation



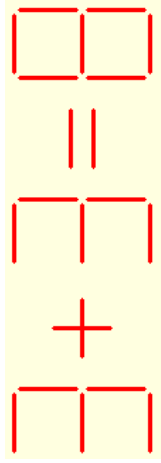
Move exactly one match to make the equation



Make the equation correct by adding two sticks.

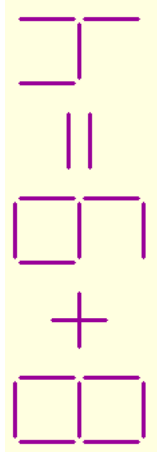


Make the equation correct by **moving** one stick.



A stick figure equation showing 3 + 3 = 8. The number 3 is formed by three horizontal sticks. The plus sign is formed by two diagonal sticks. The number 8 is formed by seven horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **removing** three sticks.



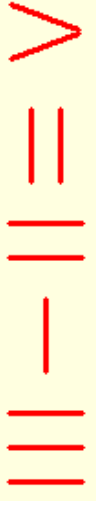
A stick figure equation showing 8 + 9 = 4. The number 8 is formed by seven horizontal sticks. The plus sign is formed by two diagonal sticks. The number 9 is formed by eight horizontal sticks. The number 4 is formed by three horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **adding** four sticks.



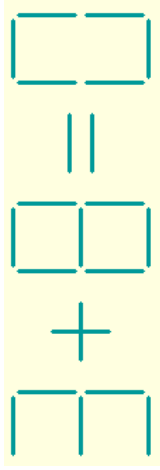
A stick figure equation showing 3526 = 9. The number 3 is formed by three horizontal sticks. The number 5 is formed by five horizontal sticks. The number 2 is formed by two horizontal sticks. The number 6 is formed by six horizontal sticks. The number 9 is formed by nine horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct in Roman Numerals by **moving** exactly three sticks.



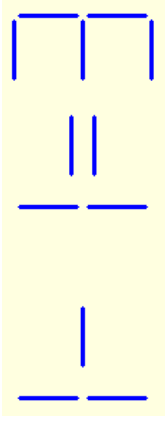
A stick figure equation showing III - III = V. The number III is formed by three vertical sticks. The minus sign is formed by two horizontal sticks. The number V is formed by five vertical sticks. The equals sign is formed by two horizontal sticks.

Make the equation correct by **removing** two sticks.



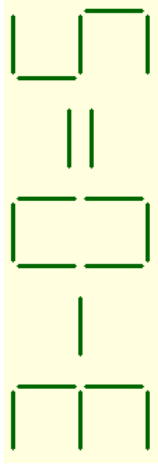
A stick figure equation showing 3 + 8 = 0. The number 3 is formed by three horizontal sticks. The plus sign is formed by two diagonal sticks. The number 8 is formed by seven horizontal sticks. The number 0 is formed by six horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **moving** four sticks.



A stick figure equation showing 1 - 1 = 3. The number 1 is formed by one horizontal stick. The minus sign is formed by two vertical sticks. The number 1 is formed by one horizontal stick. The number 3 is formed by three horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **adding** two sticks.



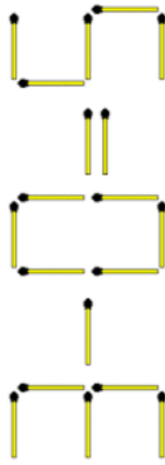
A stick figure equation showing 3 - 0 = 5. The number 3 is formed by three horizontal sticks. The minus sign is formed by two vertical sticks. The number 0 is formed by six horizontal sticks. The number 5 is formed by five horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct in Roman Numerals **without** moving a single stick.



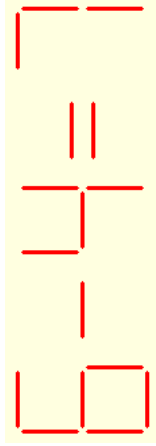
A stick figure equation showing XI + I = X. The number XI is formed by two vertical sticks. The plus sign is formed by two diagonal sticks. The number I is formed by one vertical stick. The number X is formed by two vertical sticks. The equals sign is formed by two horizontal sticks.

Make the equation correct by **adding** two sticks.



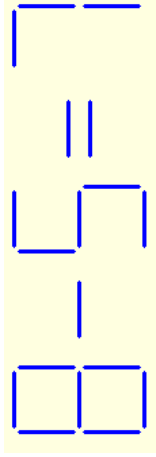
A stick figure equation showing 3 - 0 = 5. The number 3 is formed by three horizontal sticks. The minus sign is formed by two vertical sticks. The number 0 is formed by six horizontal sticks. The number 5 is formed by five horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **removing** two sticks.



A stick figure equation showing 6 - 4 = 7. The number 6 is formed by six horizontal sticks. The minus sign is formed by two vertical sticks. The number 4 is formed by three horizontal sticks. The number 7 is formed by four horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **removing** two sticks.



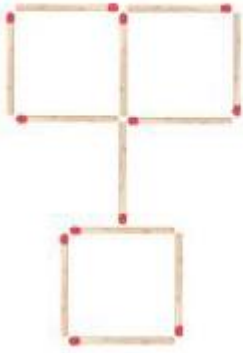
A stick figure equation showing 8 - 5 = 7. The number 8 is formed by seven horizontal sticks. The minus sign is formed by two vertical sticks. The number 5 is formed by five horizontal sticks. The number 7 is formed by four horizontal sticks. The equals sign is formed by two vertical sticks.

Make the equation correct by **adding** three sticks.



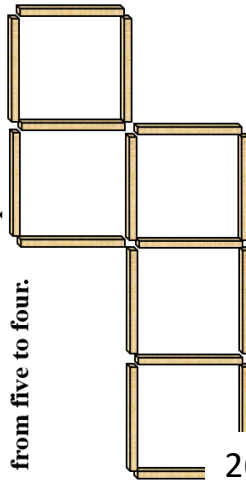
A stick figure equation showing 3526 = 9. The number 3 is formed by three horizontal sticks. The number 5 is formed by five horizontal sticks. The number 2 is formed by two horizontal sticks. The number 6 is formed by six horizontal sticks. The number 9 is formed by nine horizontal sticks. The equals sign is formed by two vertical sticks.

Move six matches to make five squares.



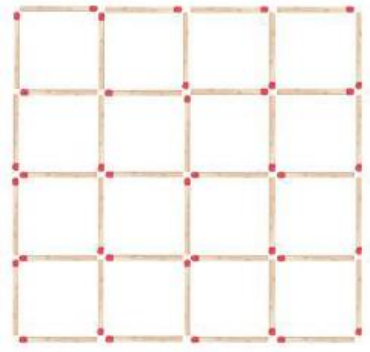
25

Move two matches to reduce the number of small squares from five to four.



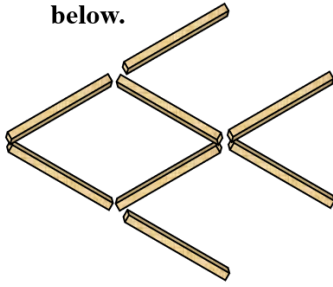
26

Remove 9 matchsticks leaving no square of any size.



27

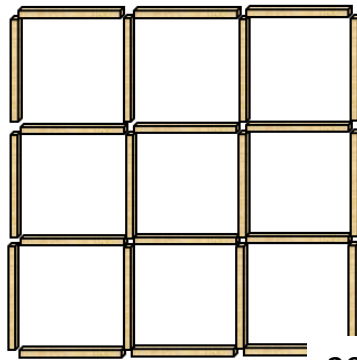
Arrange eight matches to make the fish shown below.



Move three matches to make the fish swim in the opposite direction.

28

Remove 8 matches to leave two squares.



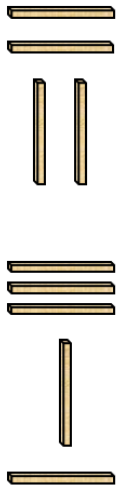
29

Move two matchsticks to make six squares.



30

Move one match to make the equation correct.



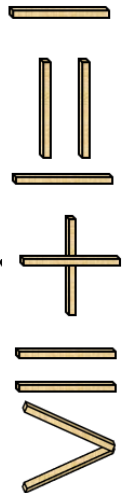
31

Correct the equation by moving just one match.



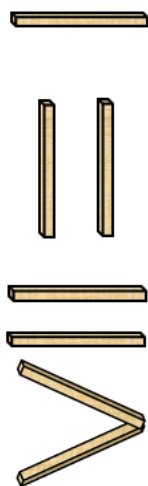
32

Remove three matches to make this equation correct.



33

Move one match to make this equation correct.



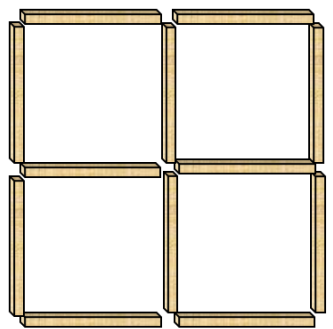
34

Place three matches on a table. Add two more matches to make eight.



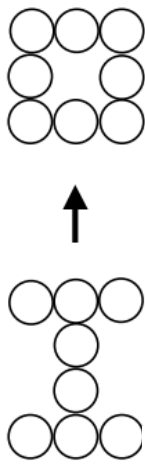
35

Move two matches to make 7 squares.



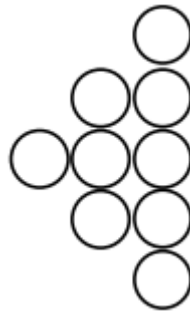
36

Change 1 into 2 in 4 moves.



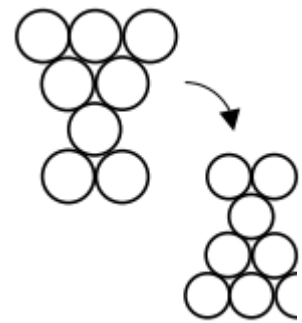
13

Change the triangle into a square in 2 moves.



14

Change 1 into 2 in 2 moves



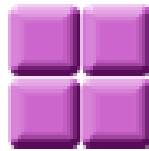
15

Place 3 dice in a line on the table. Make the total of the top equal to the total of the ends.



16

Place 4 dice in a square on the table. Make the sum of the top and bottom have a difference of 10.



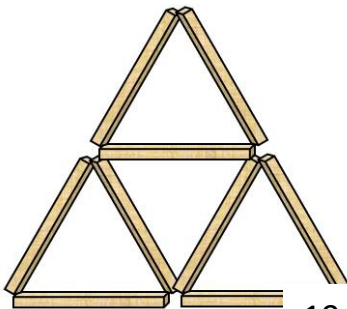
17

Place 4 dice in a line on the table. Make the total of the top equal to total of the bottom plus the total of the end two.



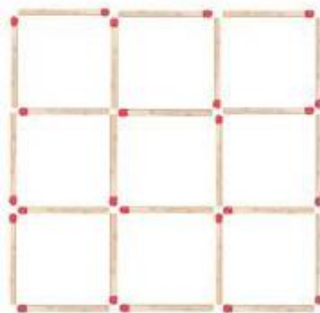
18

Take away two matches only to leave two equilateral triangles.



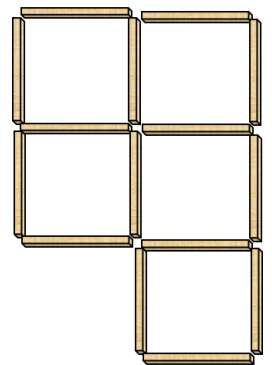
19

Leave just two squares by removing eight matchsticks.



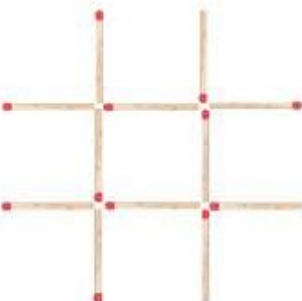
20

Take away two matches to leave three squares



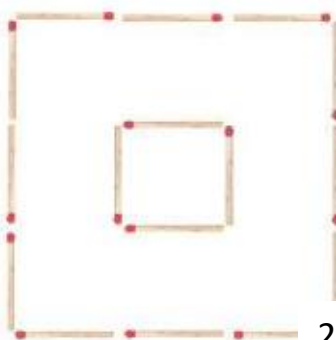
21

Move three matchsticks to make three squares.



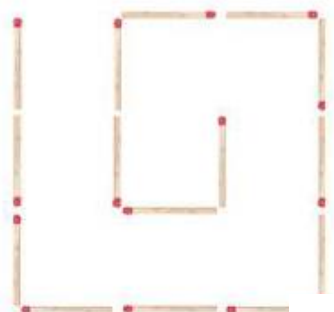
22

Move four matchsticks to make three squares.



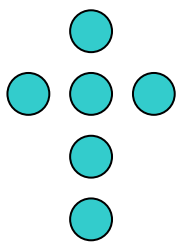
23

Move three matchsticks to make two squares.



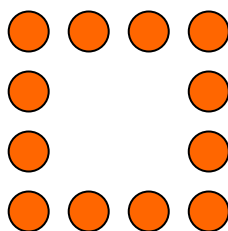
24

Move one of these coins to make two rows with 4 coins in each row.



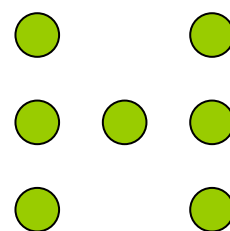
1

Move 4 of these coins to make four rows with five coins in each row.



2

Add two more coins to make ten rows with three coins in each line.



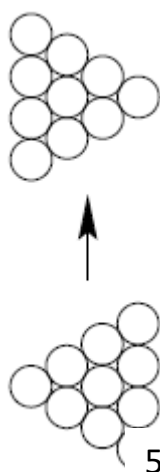
3

Change 1 into 2 in 3 moves.



4

Change 1 into 2 in 3 moves.



5

Change 1 into 2 in 3 moves.



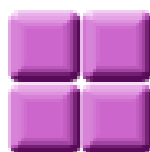
6

Place 3 dice in a line on the table. Make the totals of all 4 sides of three dice be different by 1.



7

Place 4 dice in a square on the table. Make the total of the top four and the total of the bottom four have a difference of 8.



8

Place 4 dice in a line on the table. Make the difference of the totals of the top four and the bottom four have a difference which is square.



9

Place 3 dice in a line on the table. Make the total of the top three twice the total of the bottom three.



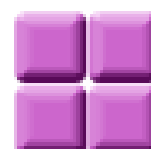
10

Place 4 dice in a line on the table. Make the total of the top four and the total of the bottom four be consecutive odd numbers.



11

Place 4 dice in a square on the table. Make the total of the top four three times the total of the bottom four.



12

Dominoes

4		6	2	
4	6	1	5	5
1	5	2	1	4
3	4	3	3	2
4	4	2	3	1
5	4	5	1	6

Dominoes

5	1	3	4	6
3	6	5	5	3
6	5	1	5	4
2		3	4	2
4	4	2	2	1
4	5	5	1	6

Dominoes

6	4	1	3	5
4	4	4	6	
		1	5	5
5		4		2
1	1	6	2	3
1	6	5	4	3

Dominoes

1	1	5	1	
1	2	5		5
6	1			6
6	2	6		3
1	2	2	6	5
3	4	4		4

Dominoes

3	1	1	2	
4	6	5		5
3	5		3	
2	2	1	1	5
	6	3	1	6
4	3	2	1	6

Dominoes

	1	1		5
1	2	1		5
4	3	6	4	1
5	6	5	1	5
2	6		3	4
3	2		3	6

Dominoes

4	4	4	2	2
6	2		5	2
5	3	1	1	4
2		6	3	3
	1	1	6	2
6	4	2	6	5

Dominoes

1	3	6	3	2
5	4	4		1
4	6	1	1	5
5	1	2	6	6
3	3	2		5
5		1	4	5

Dominoes

5	6	5	6	1
6	6	5	6	3
	2		4	
3	4	3	5	1
4	1	5	1	2
4	4	5	3	2

Dominoes

6	6	2	2	3
	5	5	3	1
	2	1	6	
5	5	4	2	2
4	3	1	5	1
4	4	6	2	5

Dominoes

2		5	1	4
3	2	5	1	2
	3	6	1	2
1	1	2	6	
6	5	5	3	2
5	4	4	4	5

Dominoes

5	6	6		4
6	6	1	1	1
3			1	1
1	3	5	5	5
1	3	5	2	4
6	5	4	5	4

Dominoes

4	6		5	4
4		6	6	3
		2	6	3
2	2	4	1	3
5	2		1	1
3	1	2	3	

Dominoes

3	2	6	3	4
4	5	3	1	2
6	6	5	2	
1	2	6	2	4
2	3	1	1	4
	1	1	3	3

Dominoes

2		5	2	6
2	2	5	3	
4	6	1		2
1	5	2	5	2
3	6	1	3	6
3	6	6	4	6

Dominoes

5	6		5	6
5	2	3	1	3
1	6	5		2
6	4	1		1
6	4	2		3
6	3	2	6	2

Dominoes

6	4	5		6
3	1	1		4
3	4			3
5	4	5	5	1
2	2	6	5	
4	3		1	2

Dominoes

3	2	4	2	3
2	1	2	2	5
3	1	1	1	5
3	6	6	4	5
				5
	2		1	4

Dominoes

6	1	6	3	5
5			1	1
2	2	5	5	
	2	4	3	4
1		4	3	6
4	5	3	6	

Dominoes

5	4	2	2	2
3	1	5	3	5
4	2	5		
3	3	1	2	4
4	4	3	6	
6	1	6		4

Dominoes

		4		
5	2	4	3	2
	4	4	6	4
		6	6	
3	1	1	6	1
6	2	4	5	5

Dominoes

6	5	5	1	1
1		1	2	2
	6		2	6
1	4	2	2	4
3	6	2	5	4
4	6	4	5	3

Dominoes

6	1	3		1
1	6	6		3
4	5	5	5	6
3	5	3		5
4	2	4	4	4
6	3	6	3	4

Dominoes

3	4	1	5	1
	3	3	4	
6	6	6	4	3
1	6	3	6	5
		6	3	1
	2	2	2	4

Dominoes

	3	6	1	4
	1	2	4	6
	4	3	3	
4	4	6		6
2	2	6		3
4	1	5	3	6

Dominoes

	5		1	
6		1	4	3
3	1	5	3	4
6	2	4	2	4
1	2	6	6	
1		2	3	4

Dominoes

	3	1	5	5
	3	4		5
2		6	5	4
3	2	6		4
1	6	3	3	4
1		2	4	2

Dominoes

4	5	3	1	2
2	5	5		4
	4	1		4
3	3	3	5	2
2		6		6
1	1	6	3	3

Dominoes

2	4	4	5	3
3	4	4		3
6	6	1	2	
4	6	1	2	2
1	4	2	4	5
3	6	6	5	5

Dominoes

4	3	5	5	3
6	3	5	5	2
4	2		2	1
4	5	1	2	4
3	3	6	3	
6	5	1	1	1

Dominoes

4	4	1	5	5
4	3	2	2	6
5	1	2	4	1
1	4	2	3	6
3		6		5
6			1	1

Dominoes

	4	5	2	5
5	6	5	5	
4	1	4	4	
2	1	4		6
6	3	6		5
3	1	6	6	1

Dominoes

1	6	2	6	2
2	1	1	1	3
2	1	3		3
	3	2	5	6
	5	5	4	4
	3		2	3

Dominoes

1	5	5		6
5	2	6	1	
3	6		2	2
2	5		6	2
1	3	1	5	1
1	3		3	2

Dominoes

	1	3	4	6
	1	3	6	2
5	2	5		3
6	4	2	1	2
6	3	6		6
2	2	1	5	1

Dominoes

2	3	6	6	2
2	4	5	5	
4	1	4	5	2
5	4	4	2	2
	4	6	3	4
1	3	5		1

Make an 8x8 square with 4 separate 1x1 squares missing from inside with pentominoes

1

Make a rectangle with an area of 50 squares

2

Make a rectangle with an area of 55 squares

3

Make an 8x8 square with a 1x1 square missing from each corner with pentominoes

4

Make an 8x8 square with a 2x2 square missing from the centre with pentominoes

5

Make a 8x5 rectangle with 8 pentominoes

6

Make a 9x5 rectangle with 9 pentominoes

7

Make a 10x5 rectangle with 10 pentominoes

8

Make an 11x5 rectangle with 11 pentominoes

9

Make a 12x5 rectangle with 12 pentominoes

10

Make a 10x3 rectangle with 6 pentominoes

11

Make a 15x3 rectangle with 12 pentominoes

12

Make a 20×3
rectangle with
12 pentominoes

25

Make a 4×10
rectangle with 8
pentominoes

26

Make a 4×15
rectangle with
12 pentominoes

27

Use 4 pentominoes
to make a double
sized:



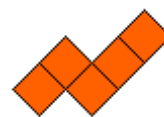
28

Use 4 pentominoes
to make a double
sized:



29

Use 4 pentominoes
to make a double
sized:



30

Use 4 pentominoes
to make a double
sized:



31

Use 4 pentominoes
to make a double
sized:



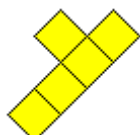
32

Use 4 pentominoes
to make a double
sized:



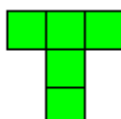
33

Use 4 pentominoes
to make a double
sized:



34

Use 4 pentominoes
to make a double
sized:

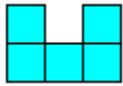


35

Make two
seperate
squares each
out of 5
pentominoes

36

Use 4 pentominoes
to make a double
sized:



13

Make a
rectangle with
an area of 50
squares

14

Make a 6x5
rectangle and a
4x5 rectangle at
the same time

15

Use 9 pentominoes
to make a triple
sized:



16

Use 9 pentominoes
to make a triple
sized:



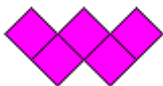
17

Use 9 pentominoes
to make a triple
sized:



18

Use 9 pentominoes
to make a triple
sized:



19

Use 9 pentominoes
to make a triple
sized:



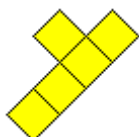
20

Use 9 pentominoes
to make a triple
sized:



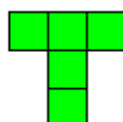
21

Use 9 pentominoes
to make a triple
sized:



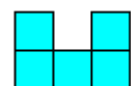
22

Use 9 pentominoes
to make a triple
sized:



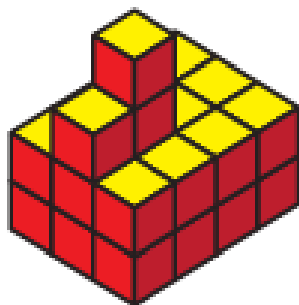
23

Use 9 pentominoes
to make a triple
sized:

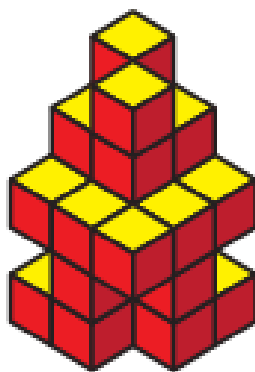


24

④



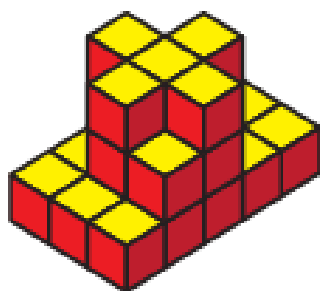
13



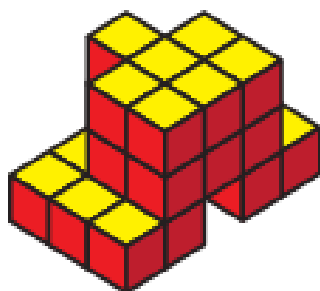
14



15



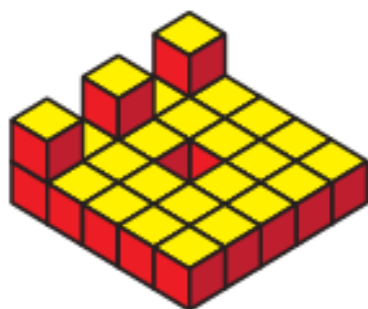
16



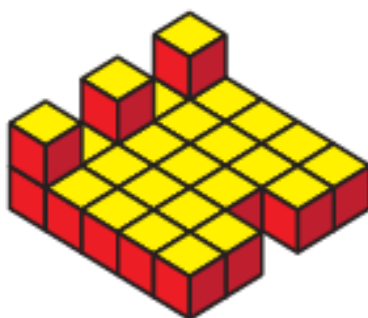
17



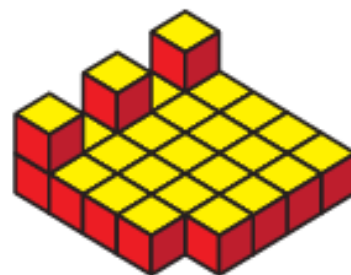
18



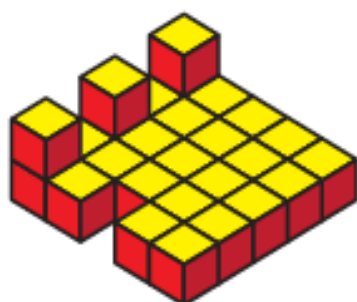
19



20



21



22

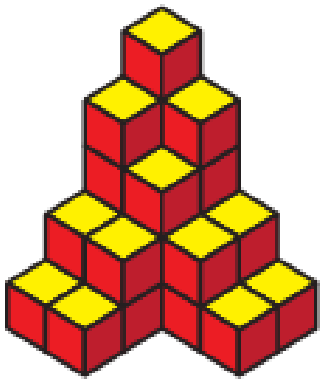


23

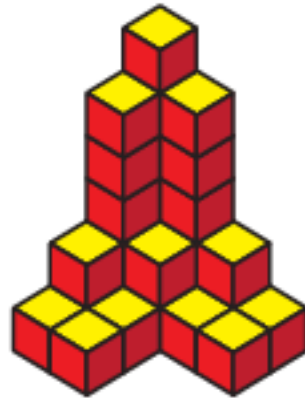


24

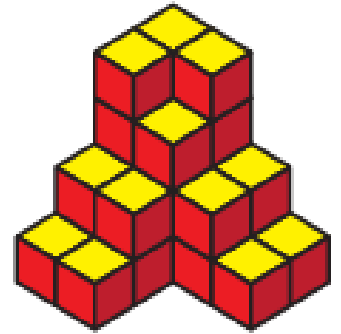
④



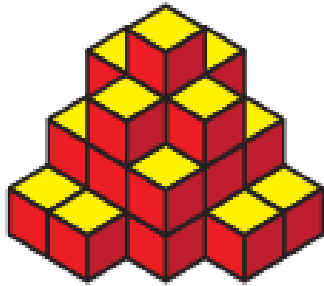
25



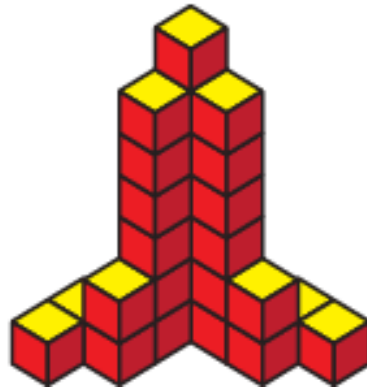
26



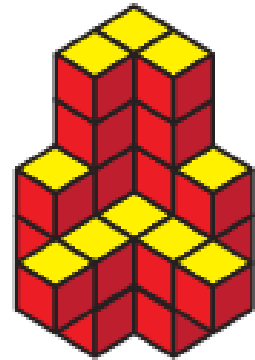
27



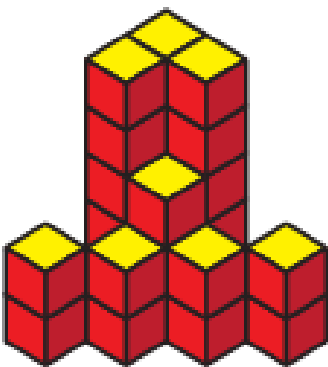
28



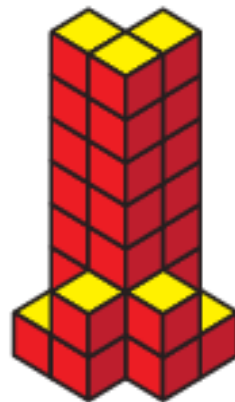
29



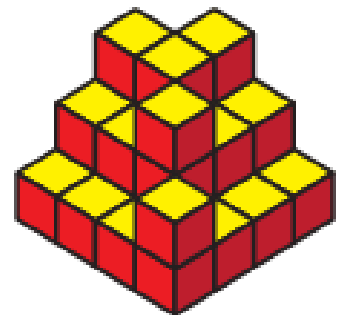
30



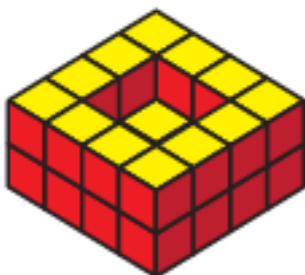
31



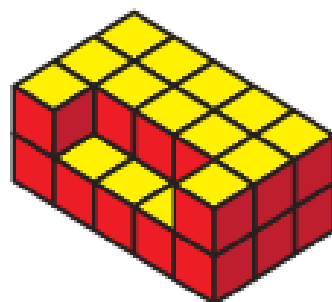
32



33



34



35

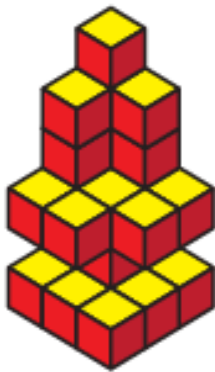


36

④



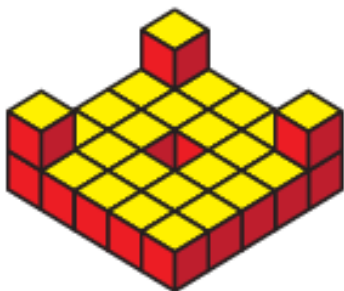
1



2



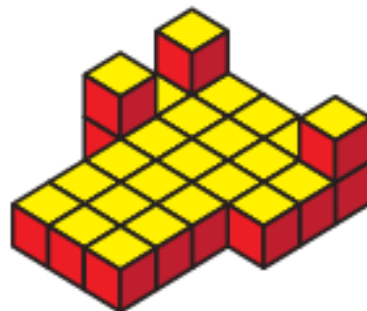
3



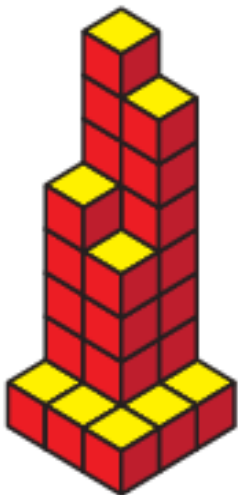
4



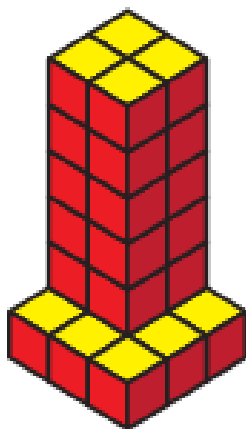
5



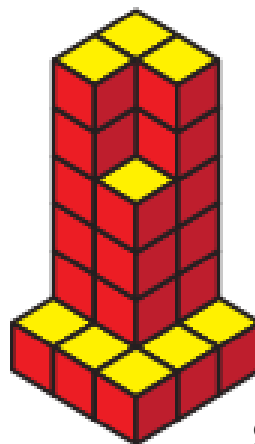
6



7



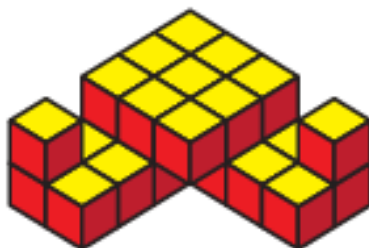
8



9



10



11



12