NCERT Solutions for Class 4 Maths Chapter 10: NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns helps students to learn various patterns found in numbers, shapes, and designs. This chapter encourages students to identify and create patterns, promoting their logical and creative thinking skills.

The exercise contains questions that guide students in recognizing these patterns and our NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns provide simple and clear explanations to help students easily grasp the concepts. By using these solutions students can improve their understanding of patterns and enjoy the process of learning through play.

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Overview

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns are prepared by subject experts of Physics Wallah to ensure that students grasp the fundamental concepts of patterns in numbers, shapes, and designs. This chapter introduces young learners to the world of patterns, encouraging them to recognize, create, and extend patterns in an engaging way.

The solutions provide clear and easy-to-follow explanations for all exercises making it easier for students to understand and apply the concepts. With these solutions students can enhance their logical thinking and creativity while mastering the topic of patterns.

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns PDF

The solutions for NCERT Class 4 Maths Chapter 10 Play with Patterns are designed to make understanding patterns easy and enjoyable for students.

Students can use these solutions to improve their understanding of patterns in numbers, shapes, and designs. The complete solutions are available in PDF format. You can download the PDF using the link provided below.

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns PDF

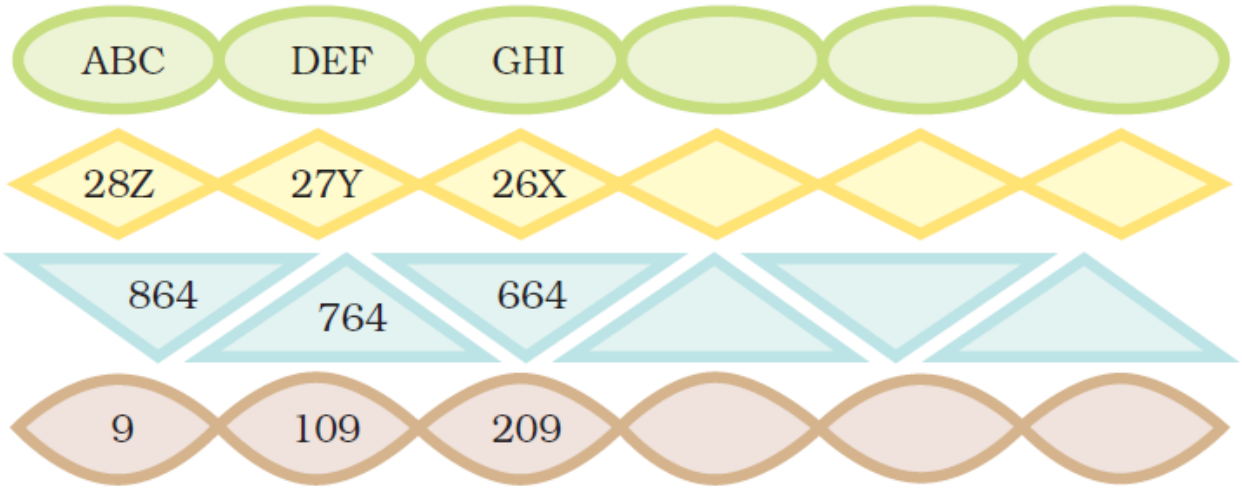
NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns

Here we have provided NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns-

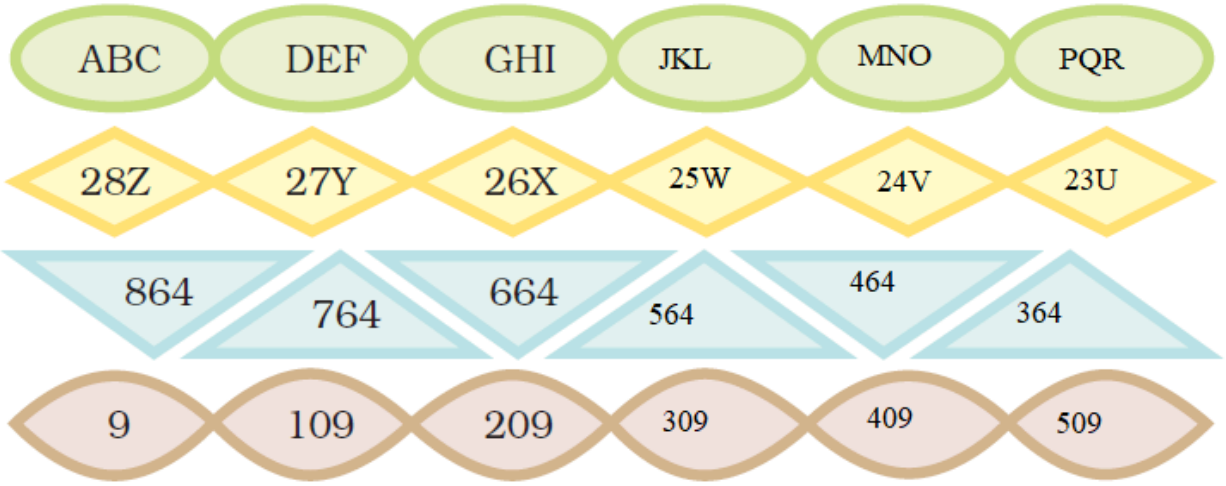
NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 109

Question: 1

We can also make patterns with numbers and letters. Below are a few examples. Can you take them forward?

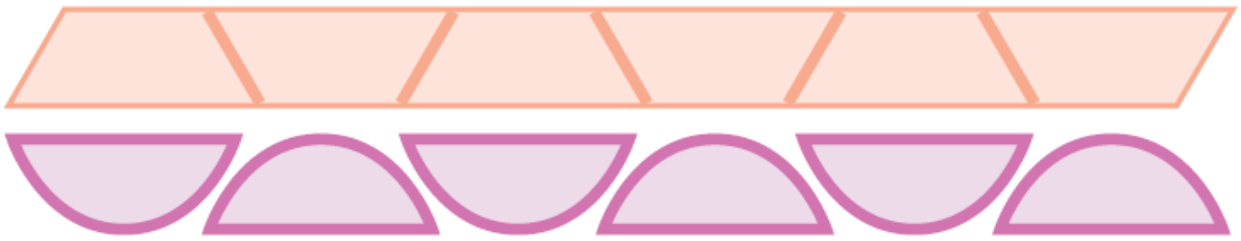


Answer:

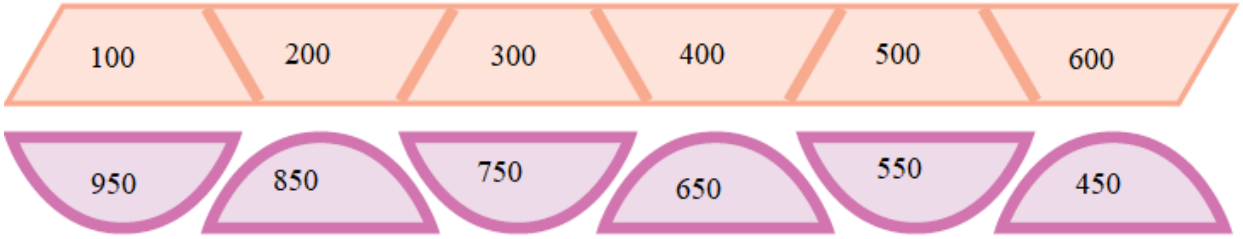


Question: 2

Now write your own number patterns.



Answer:



Question: 3

Make a pattern without numbers.

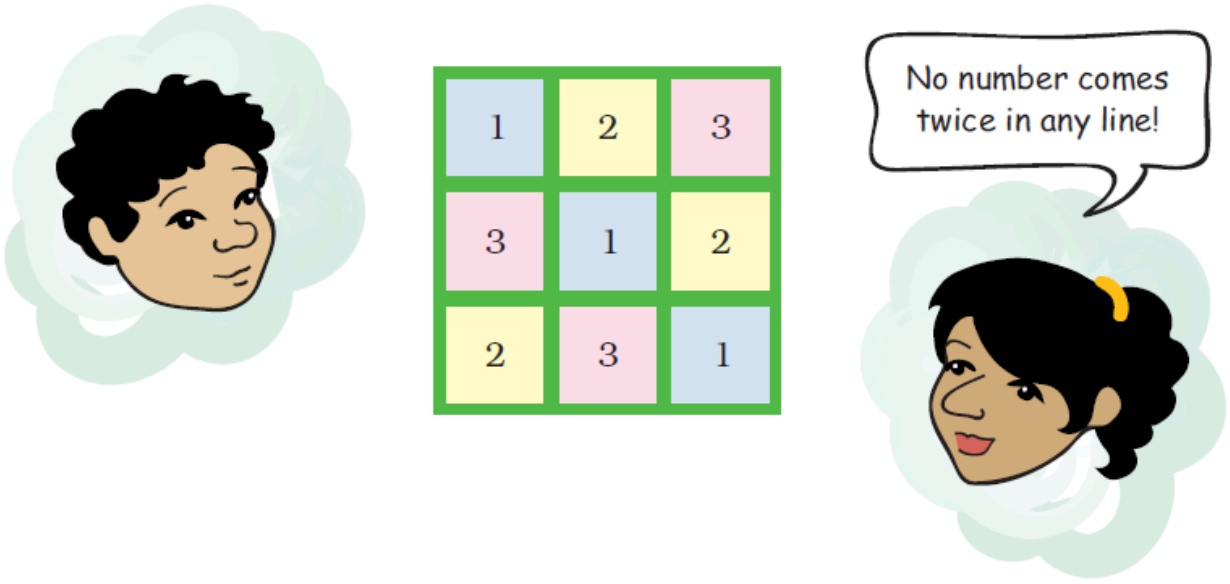
Answer: A pattern without numbers is given below:

ABC	DEF	GHI	JKL	MNO	PQR

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 110

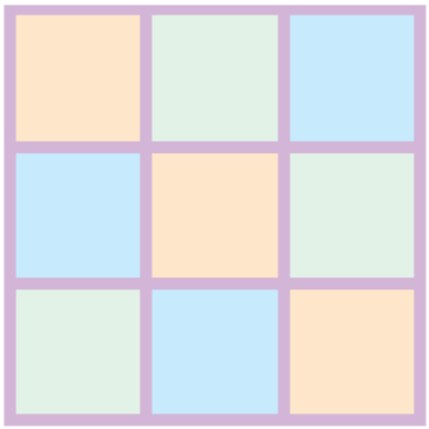
No Number Comes Twice

Look at the number box. Can you see a pattern?

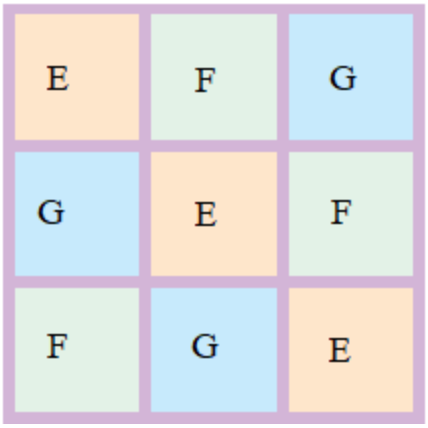


Question: 4

Now, you try writing the letters – A, B, and C in the box so that no letter comes twice in any line.



Answer:

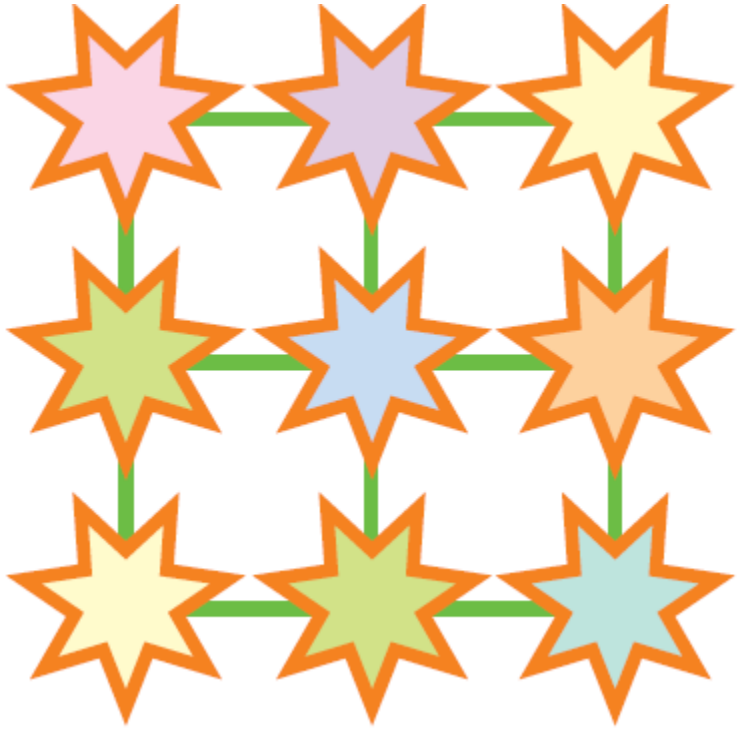


NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 111

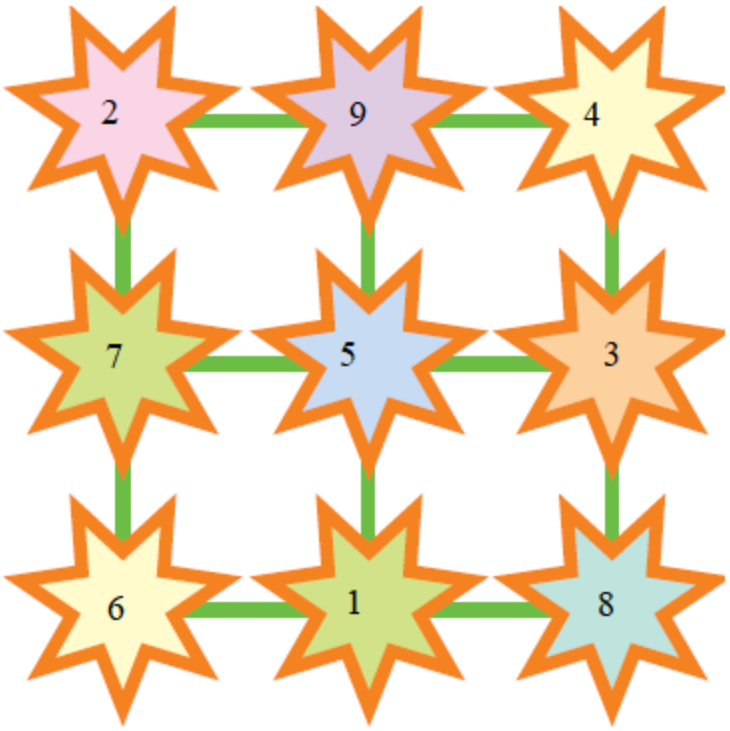
Magic Patterns

Question: 5

Now you fill these stars. Use numbers 1 – 9 and the rule that the numbers on each line add up to 15.



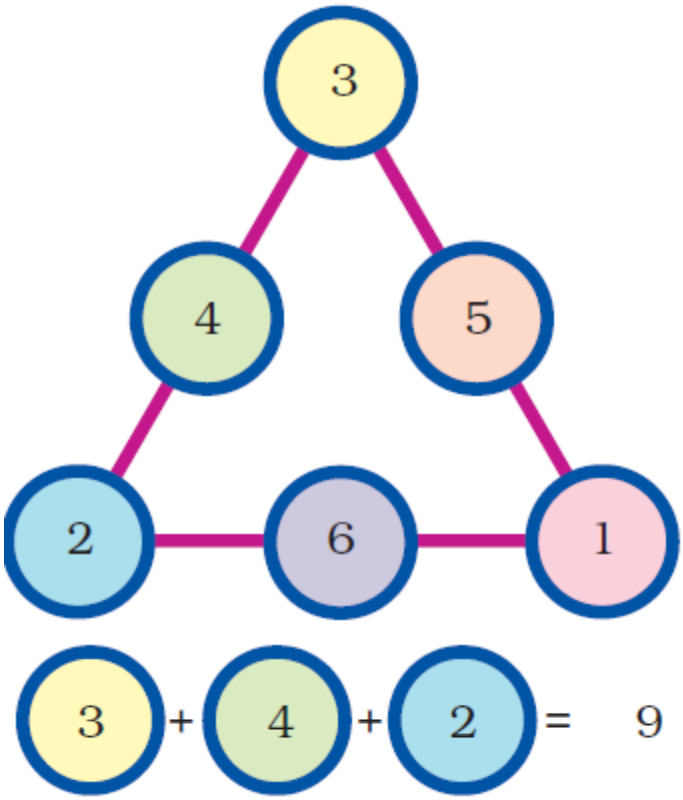
Answer: In the figure given below, the numbers are filled in the stars from 1 to 9, which adds up to 15 in each line.



Magic Triangles

Look at this number pattern.

Rule: Numbers on each side of the triangle add up to 9.



Question: 6

See if the other sides of the triangle also add up to 9.

Answer: Yes, the numbers on the other sides of the triangle add up to 9.

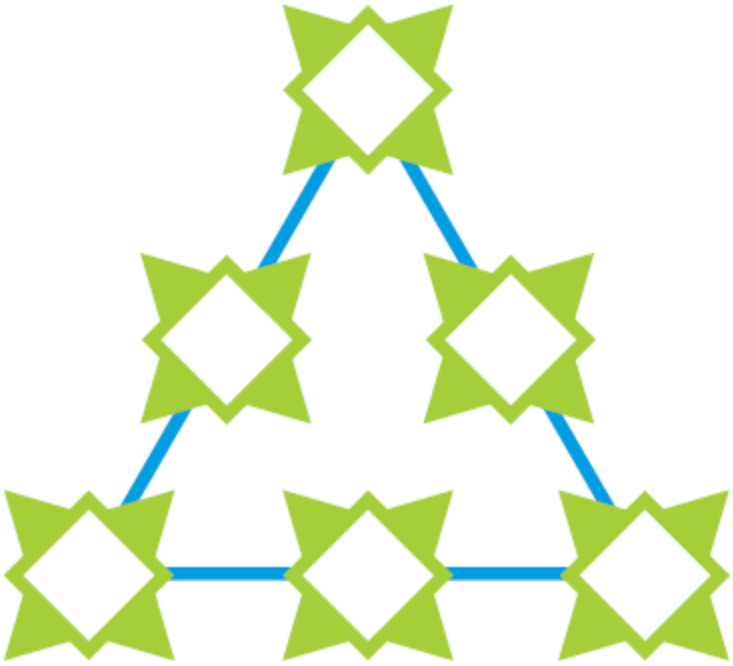
3 + 5 + 1 = 9, and 2 + 6 + 1 = 9.

NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 112

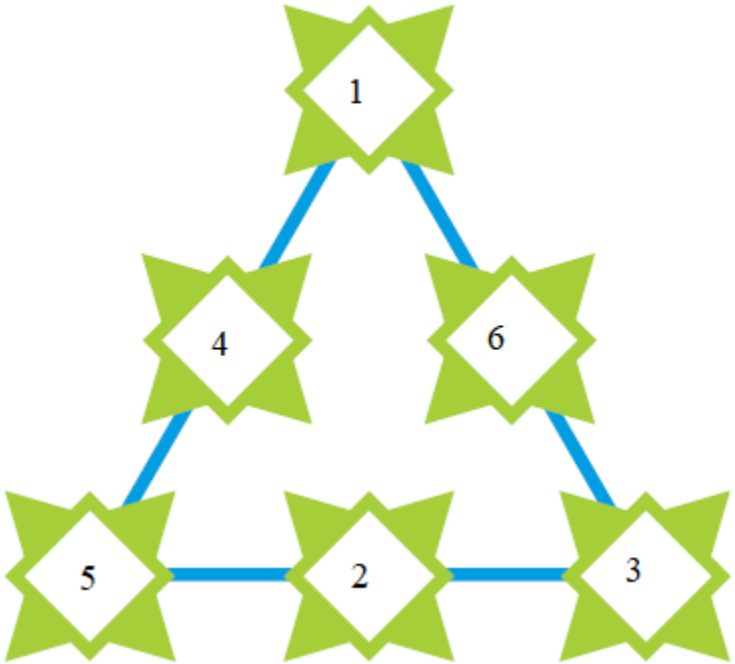
Question: 7

Now, use numbers 1 – 6 to make your own magic triangle.

Rule: Numbers on each side must add up to 10



Answer: The numbers from 1 to 6 are arranged in the figure below, which add up to 10 in each line.

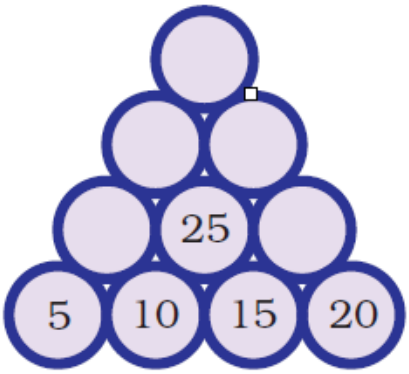


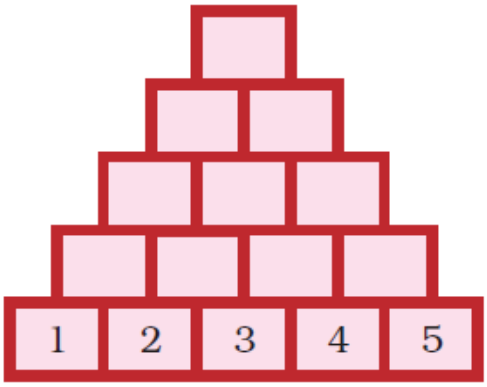
NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 113

Number Towers

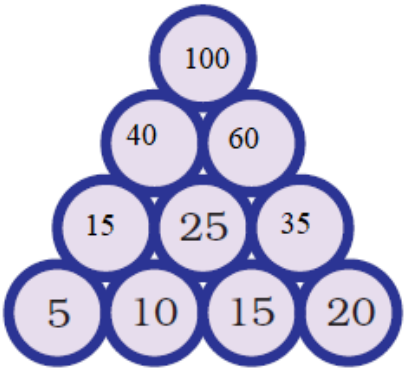
Question: 8

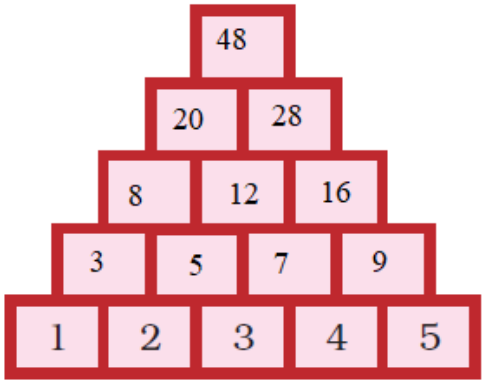
Using the same rule, completer these number towers.





Answer:





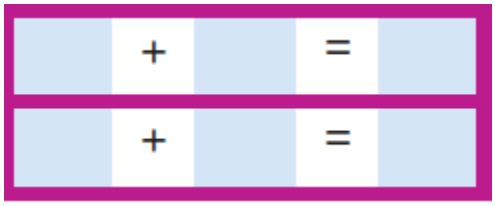
The Same Sum Rule

Some friends are playing with number cards. See how they add.

Question: 9

Now you write any number and the three numbers after that. Make a pattern using the rule.

See if you get the same sum.



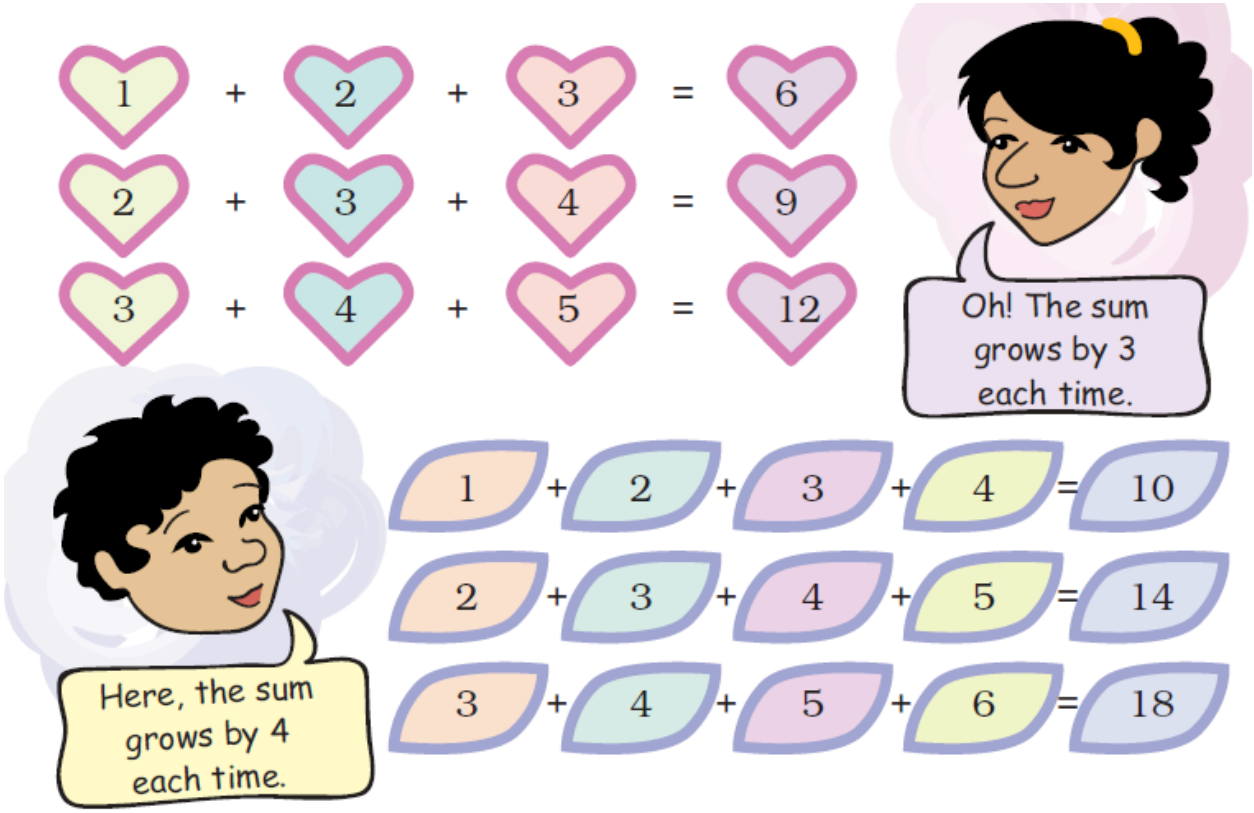
Answer: The numbers using the same pattern are given below:

21	22	23	24

21	+	24	=	45
22	+	23	=	45

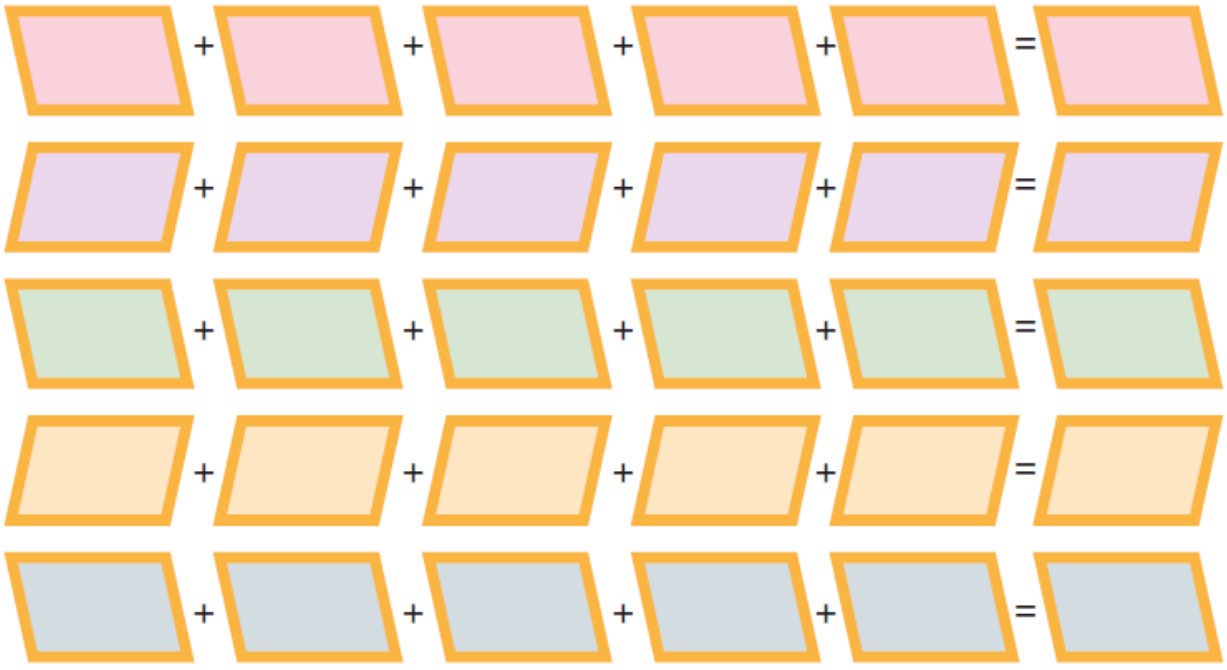
NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 114

Patterns with Addition



Question: 10

Now, you try to make such a pattern with 5 numbers in order.



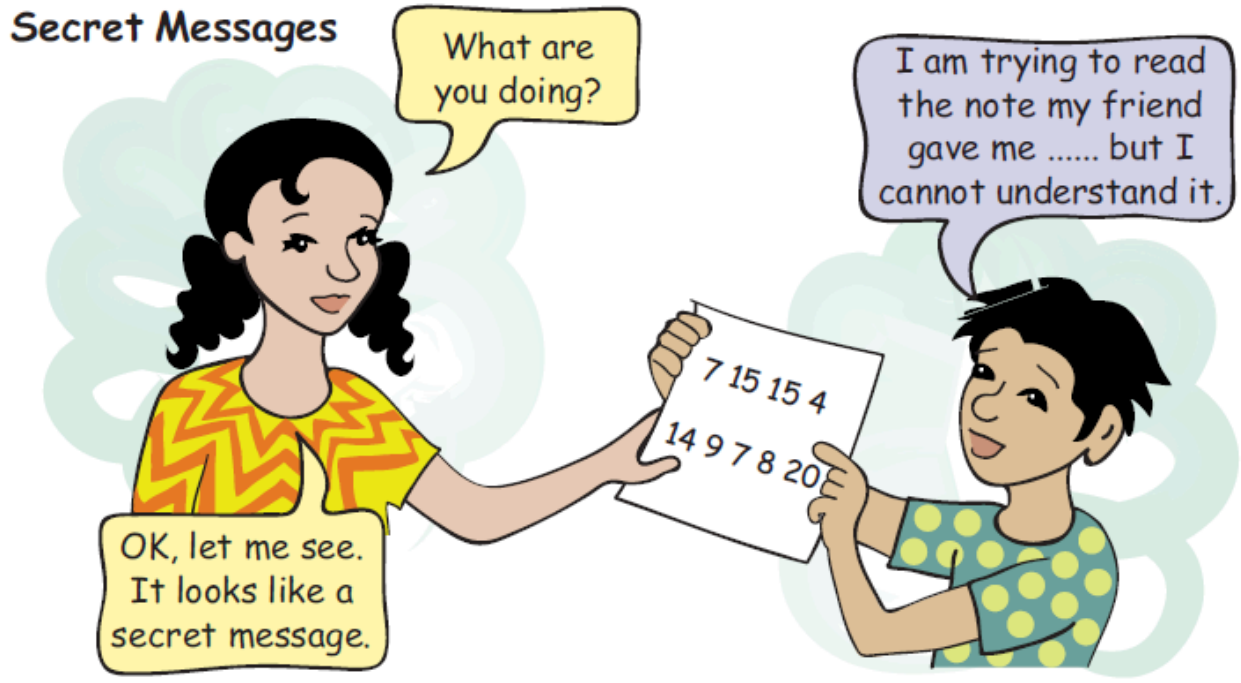
Answer:

1	+	2	+	3	+	4	+	5	= 15
2	+	3	+	4	+	5	+	6	= 20
3	+	4	+	5	+	6	+	7	= 25
4	+	5	+	6	+	7	+	8	= 30
5	+	6	+	7	+	8	+	9	= 35

Question: 11

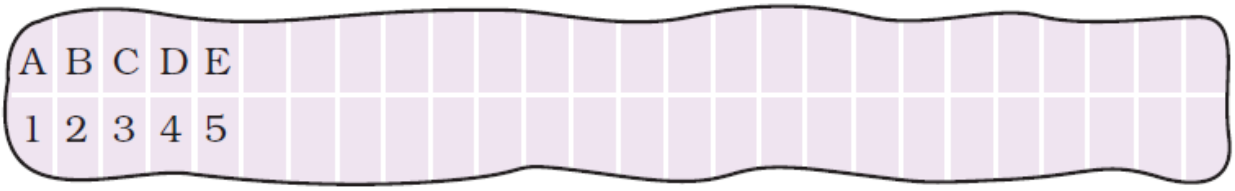
Does the sum grow by 5 each time?

Answer: Yes, the sum grows by 5 each time.

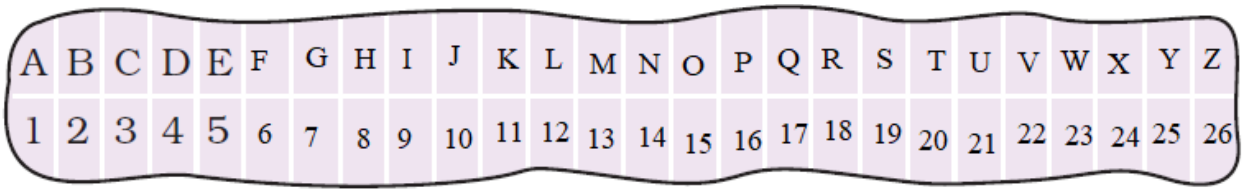


Question: 12

Complete this list of letters and numbers to help you.



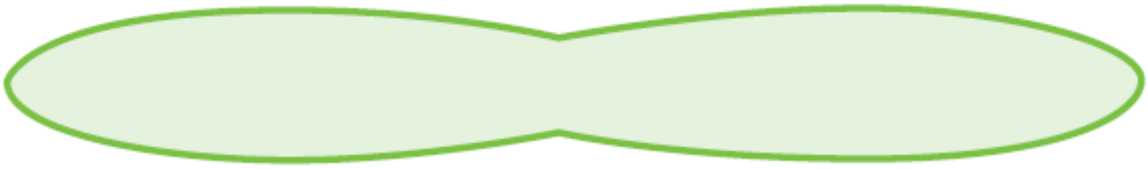
Answer:



Question: 13

Teenu wants to write to his friend 'Good Morning'.

What will he write by using the same rule?

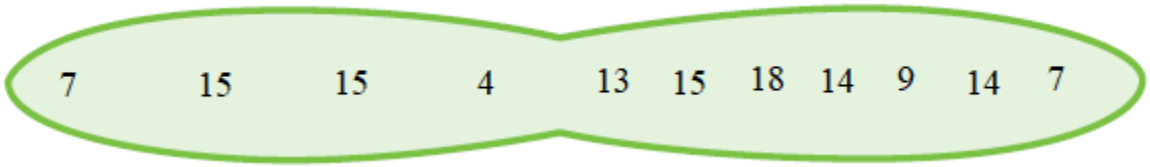


Answer:

G = 7 O = 15 O = 15 D = 4

M = 13 O = 15 R = 18 N = 14 I = 9 N = 14 G = 7

Hence, Good Morning can be written as follows



Question: 14

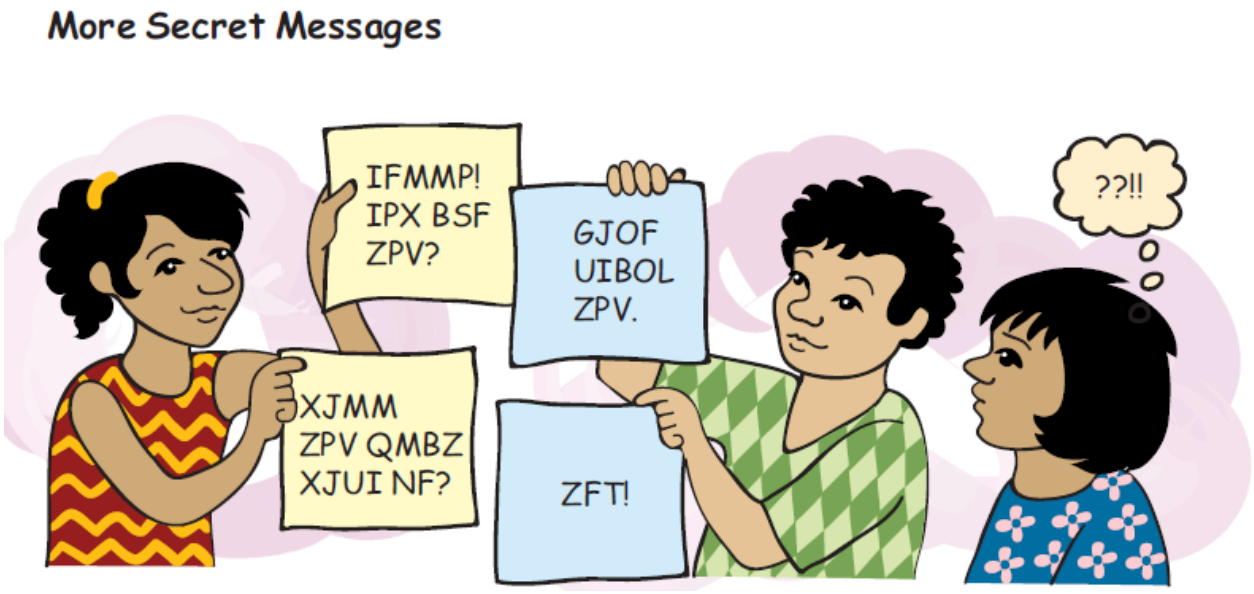
If we change the rule and write 1 in place of ‘B’, 3 in place of ‘D’ and so on, then how will we write ‘let us dance’?

Answer: L = 11 E = 4 T = 19

U = 20 S = 18

D = 3 A = 26 N = 13 C = 2 E = 4

Therefore, ‘let us dance’ can be written as follows



Question: 15

What was Kahuli’s secret message?

Answer: The new arrangement of letters for the secret message is given below:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A

Hence, Kahuli's secret message was 'XF BSF GSJFOET', i.e. WE ARE FRIENDS

Question: 16

What did Shablu and Jaggu write?

Answer: The secret message written by Shablu is 'IFMMP! IPX BSF ZPV?' And 'XJMM ZPV QMBZ XJUI NF?'

Hence,

'IFMMP! IPX BSF ZPV?' becomes – Hello! How are you?

And 'XJMM ZPV QMBZ XJUI NF?' becomes – Will you play with me?

The secret message written by Jaggu is 'GJOF, UIBOL ZPV ZFT!'

Hence, the secret message written by Jaggu is – Fine, thank you. Yes!

Question: 17

Use the same rule to write – 'Meet me on the moon'.

Answer: 'Meet me on the moon' secret message will be NFFU NF PO UIF NPPO.

Question: 18

Make different rules and ask your friends to crack the secret message.

Answer: Let the new rule be – write 'A' in the place of 'C', 'B' in the place of 'D' and so on. The new key for this new rule will be as follows:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X

Now, write 'I am Sorry' by using this new rule.

The secret message for 'I am Sorry' will be 'G YK QMPPW

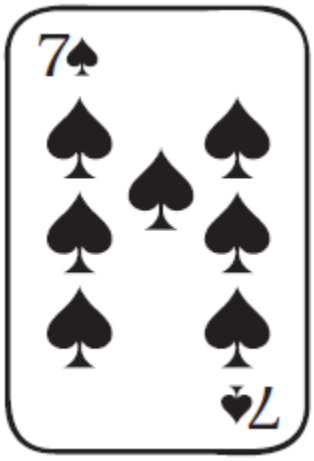
NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns Page No: 117-119

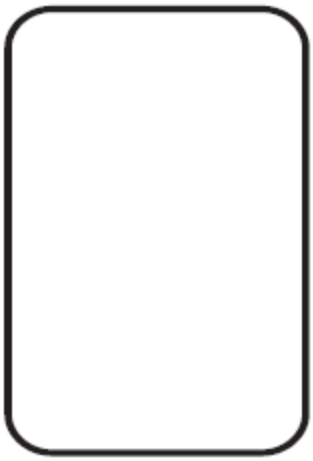
Upside Down

Anisha is playing. She is showing her friends that she can stand on her head.

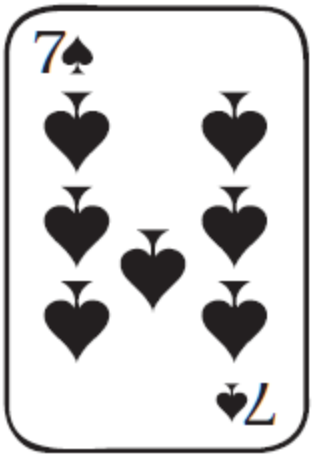
Question: 19

Now, Anisha is playing with this card. Draw what it will look like when upside down.

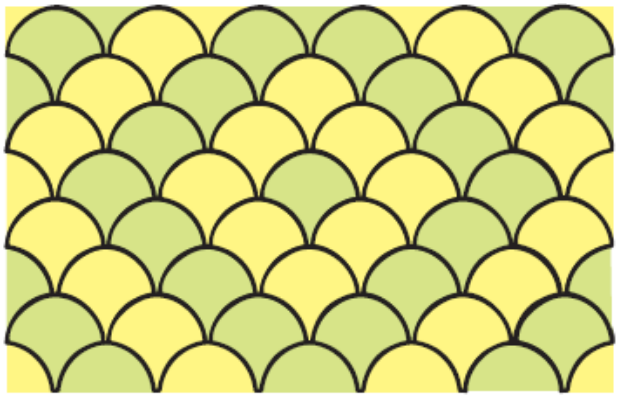


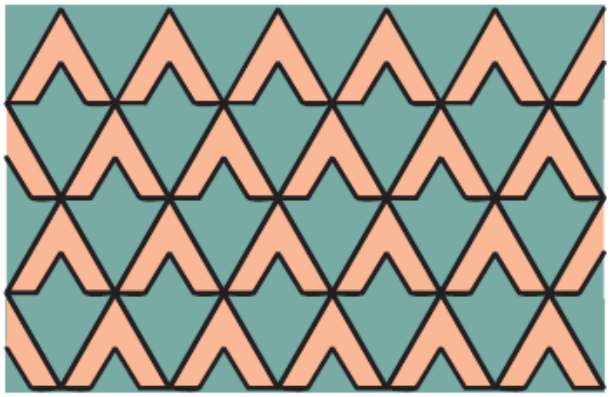


Answer: The card, when made upside down, will look like as shown below:



Floor Patterns



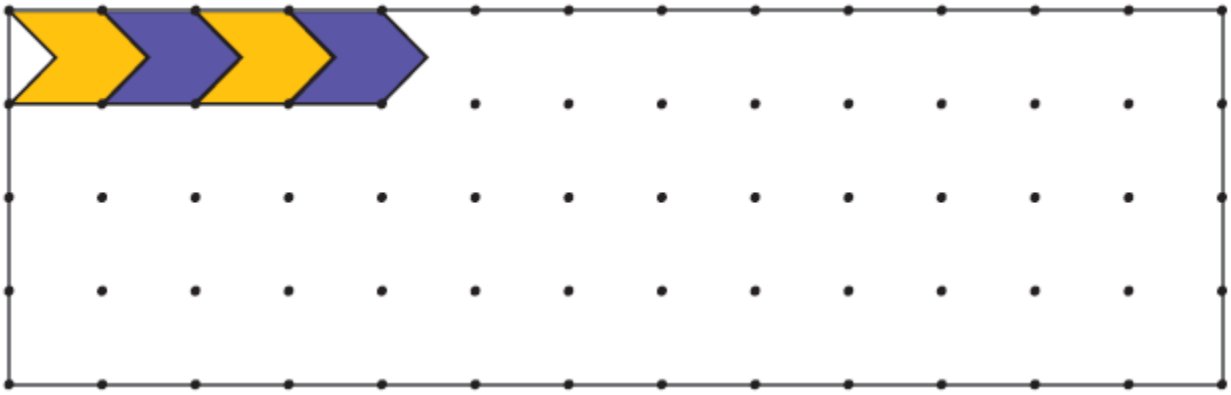


Question: 20

Have you ever seen a floor with tiles of these shapes?

Answer: No, I have never seen these shapes of tiles on the floor.

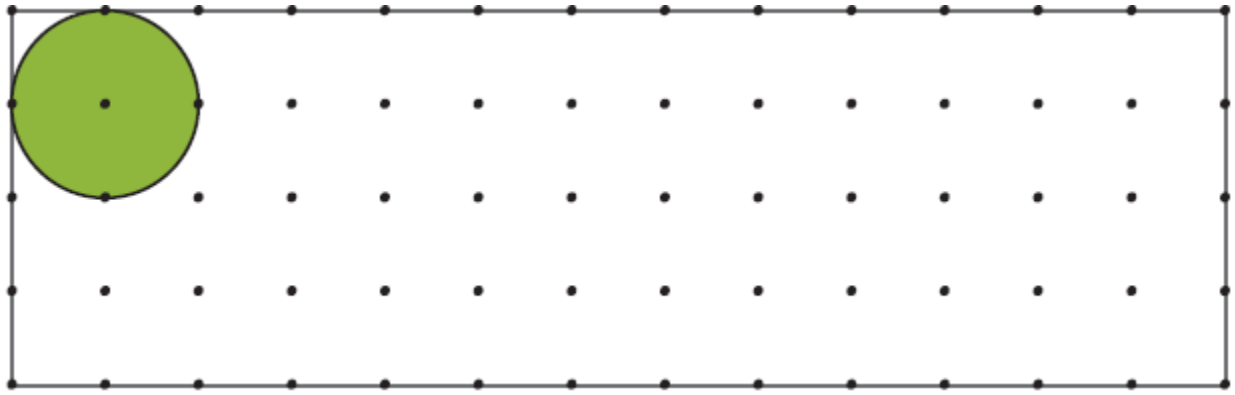
(a) Now, you cover this floor with this tile.



Answer: Do it yourself.

(b) Can you make such a floor design with a tile like a circle?

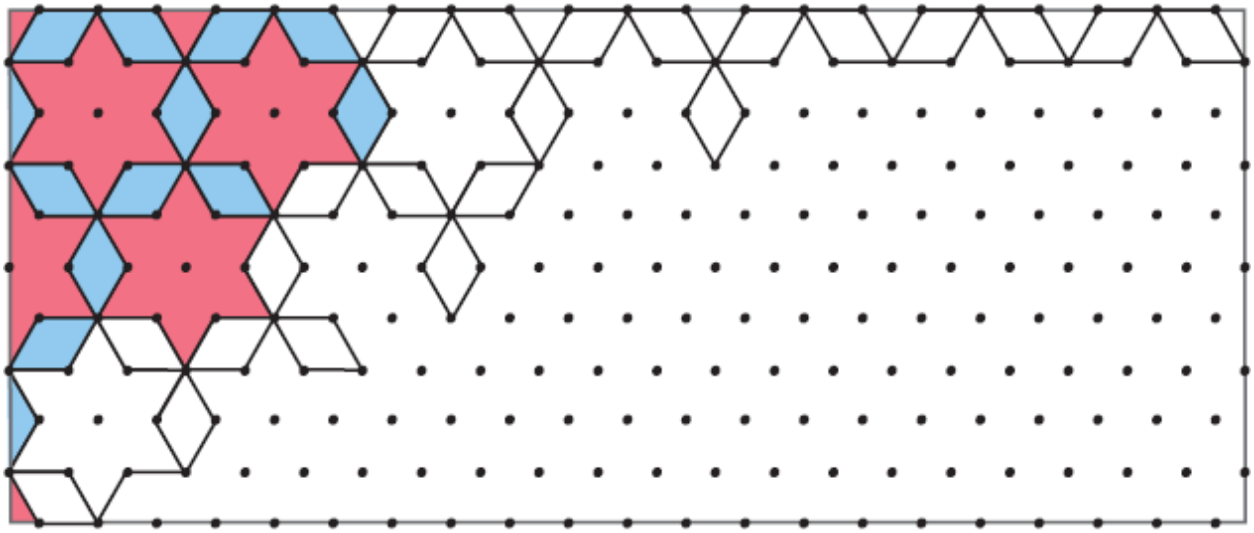
Try with this green tile without leaving a gap. Could you do it? Discuss with your friends.



Answer: Do it yourself.

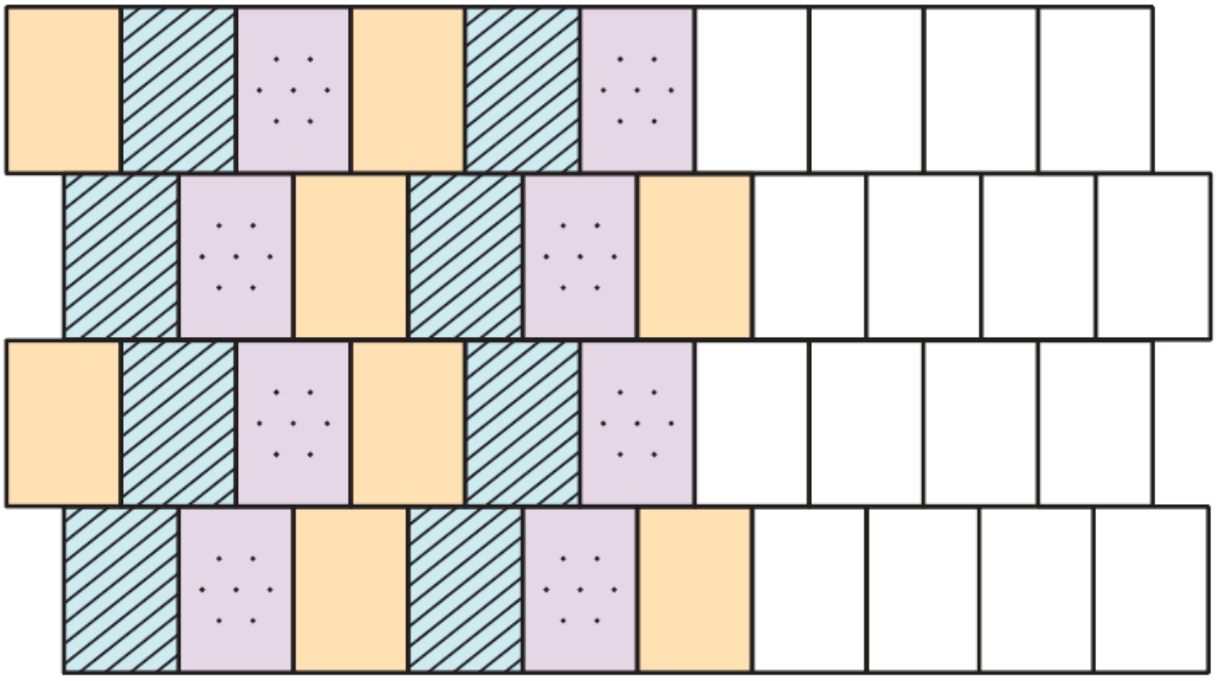
We cannot make a design without leaving a gap by using circular tiles.

(c) Complete this tiling pattern.



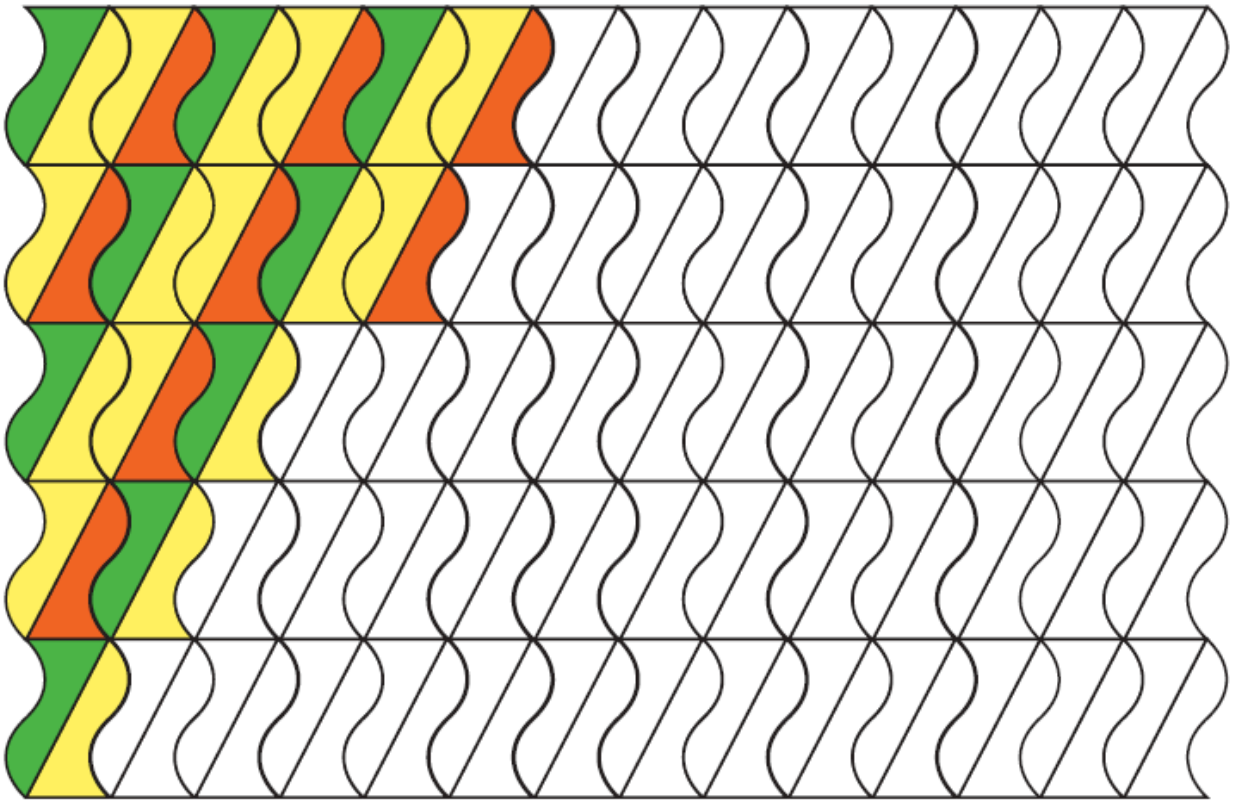
Answer: Do it yourself.

(d) Ramaiya has made a wall with his blocks. Can you complete this for him?



Answer: Do it yourself.

(e) Renu began to paint this wall. Now you help her to complete it.



Answer: Do it yourself.

Benefits of NCERT Solutions for Class 4 Maths Chapter 10 Play with Patterns

- **Clear Understanding**: The solutions provide step-by-step explanations making it easier for students to grasp the concept of patterns in numbers and shapes.
- **Strengthens Logical Thinking**: By solving pattern-related problems students can improve their logical reasoning and problem-solving abilities.
- **Fun Learning**: The chapter encourages creativity by allowing students to learn and create their own patterns, making learning enjoyable.
- **Concept Clarity**: The solutions simplify complex ideas, helping students better understand patterns and how they work.
- **Easy Access**: The solutions are available in a convenient PDF format making it easy for students to download and study anytime.