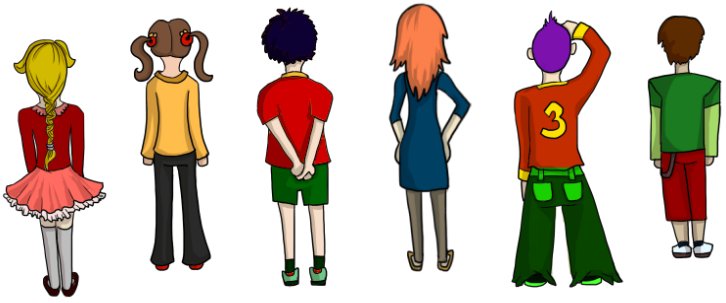
AlgoHack #Beaver 0

Broken Window

Six children were playing in the yard.



One of them threw a ball and broke Mr. Beaver's window. Mr. Beaver only saw the back of the child running away. The child had a red shirt and short dark hair.

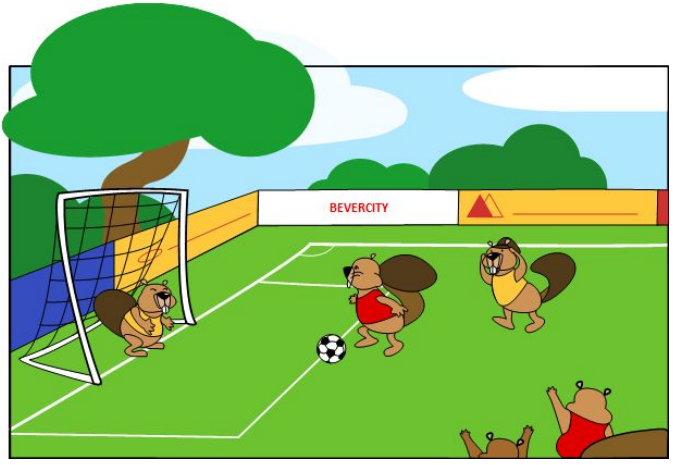
Question:
Who broke the window?

Soccer Game

The Beaver Rangers have been playing a soccer game against the Forest Raiders.

Here are the goal scorers:
minute 1: Anna
minute 10: Dick
minute 35: Bernard
minute 47: Smithy
minute 73: Backy
minute 89: Richard

The game was exciting
No team ever scored twice in a row.



Question: What was the final score after 90 minutes?
3-3 , 2-3 , 4-2, 3-4

Flags on the Beach

Albert is the father of Beatrix and Richard. Albert is a guard on the beach.

When Beatrix and Richard are playing on the beach, Albert uses flags to send them messages.

This is what they mean:

The Flag on top:

	If the flag is blue, the message is for Beatrix
	If the flag is red, the message is for Richard
	If the flag is blue-red the message is for Beatrix and Richard

The Flag in the middle:

	Meal available
	Drink available

The Flag on the bottom:

	Hurry
	No need to hurry

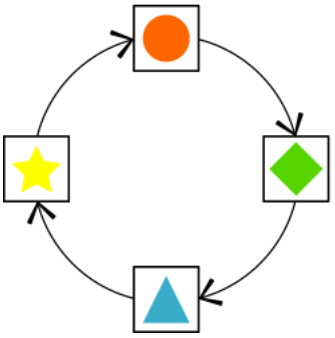
Question:

What do the flags on the pole below mean?

Magic Roller

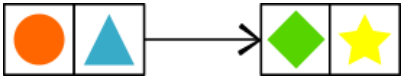
The Beaver children have found a magic roller.

The roller replaces a shape in a painting with the next shape shown by the arrows below.



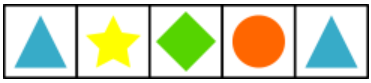
Example:

When Ben uses the magic roller to paint over the painting on the left, he gets the painting on the right.



Question:

What will the painting below look like after using the magic roller?

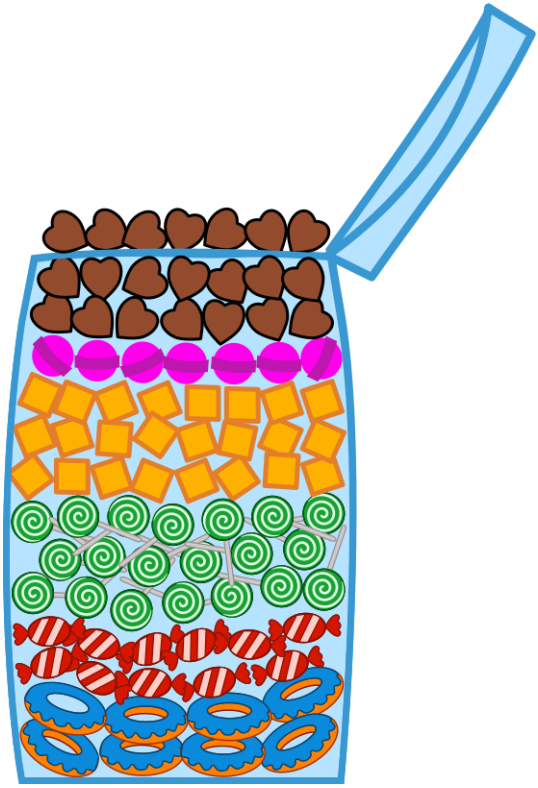


SWEETS

Beaver Tom is given a lot of sweets from his grandparents.

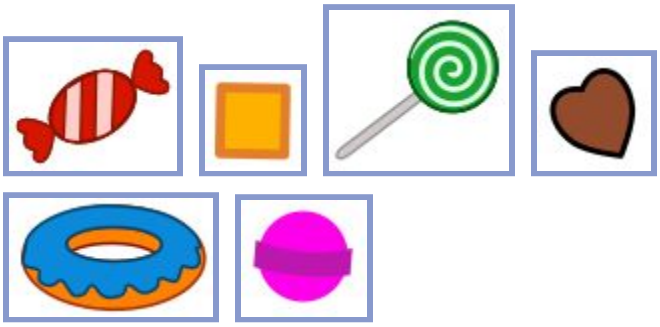
He wants to put all of them into the candyjar but when he does, the lid won't close.

To make them fit he decides he will remove all of the sweets of one type, but which ones?



Question:

Which type of sweets should beaver Tom take out of the jar, so he can close the lid and keep as many sweets as possible?



Shelf sort

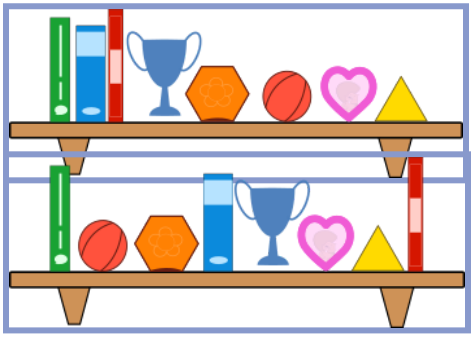
Beatrix is trying to rearrange her shelf.

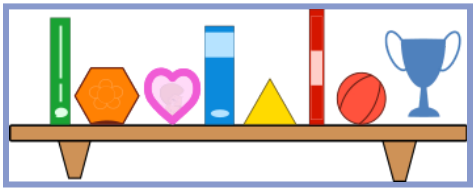
She has two rules:

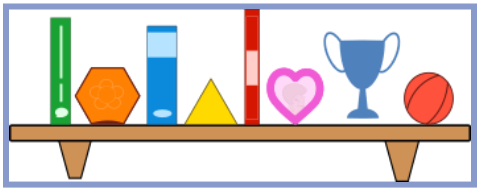
1. Rectangular items must not be next to each other.

2. Circular items must not be next to rectangular items.

Question:
Which one of these shelves has followed her rules correctly?



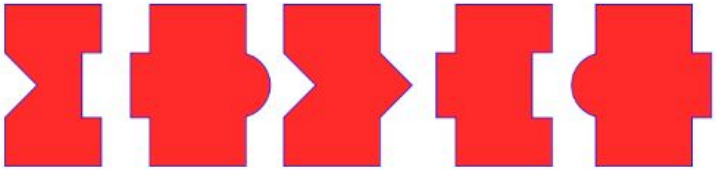




Puzzle

The beavers have a new puzzle. They want to make pairs!

Which two pieces that snap together into the space below to make a pair. Then try and make another.

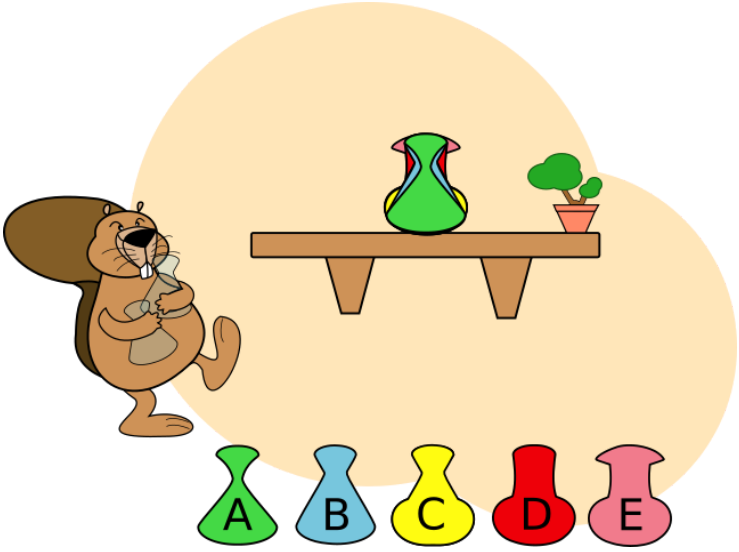


Bottles

A Beaver puts five bottles on a table.

He places them so that every bottle has a bit showing.

He places the first bottle at the back of the table and puts each new bottle in front of those already placed.



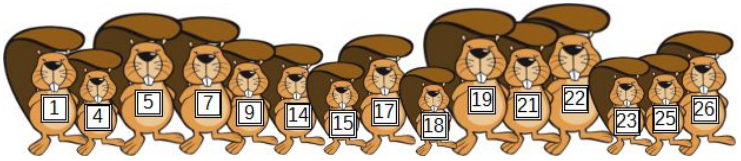
Question:

In what order are the bottles placed when they appear as shown in the picture?

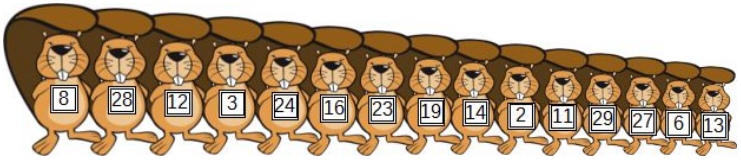
SOCCER GAME

Two teams of 15 players are shown below, with numbers printed on their jerseys. The players of the first team are ordered by jersey number. The players of the second team are ordered by player height.

Team 1's jersey numbers are: 1, 4, 5, 7, 9, 14, 15, 17, 18, 19, 21, 22, 23, 25, 26



Team 2's jersey numbers are: 8, 28, 12, 3, 24, 16, 23, 19, 14, 2, 11, 29, 27, 6, 13



Question:

How many jersey numbers are used in team 1 that are also used in team 2?

DINNER PARTY

To arrange a dinner party Sara the beaver needs to talk to five friends: Alicia, Beat, Caroline, David and Emil.

Sara can talk to Emil right away. However, to talk to her other friends, there are a few points to consider:

1- Before she talks to David, she must first talk to Alicia.
2- Before she talks to Beat, she must first talk to Emil.
3-. Before she talks to Caroline, she must first talk to Beat and David.
4- Before she talks to Alicia,she must first talk to Beat and Emil.

Question:
In what order should Sara talk to all of her friends if she wants to talk to all of them?

Write the names into the right order.

MOUSE & CHEESE

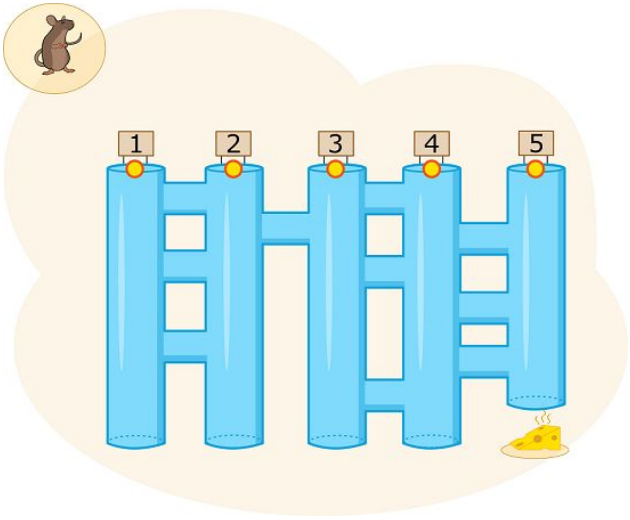
A mouse is at the entrance of a tube system. It wants to reach the cheese at the end of tube 5.

The mouse always follows these commands:

1. Go downwards until a crossing

2. At the crossing, move through to the next vertical tube

3. Go to command 1

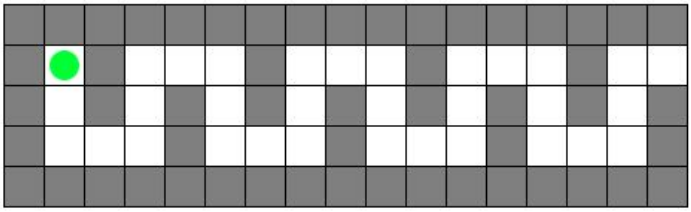


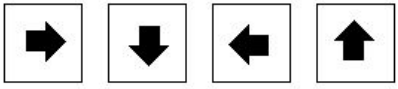
Question: In which tube should the mouse start so that it reaches the cheese?

ROBOT MAZE

Help the green robot to exit the maze.

Drag the arrows to form a set of instructions.
The robot will repeat these instructions 4 times.





Source : challenge.bebras.uk