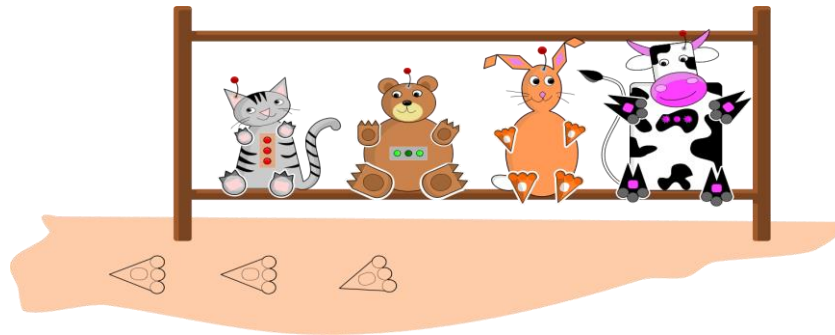


Tasks T1 – T7 carry 3 points each

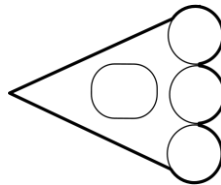
T1. Footprint

There are four robot animals in a shop.

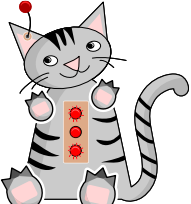
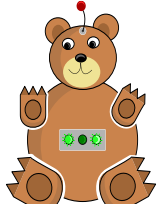
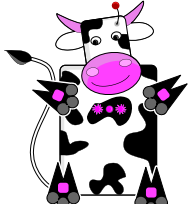
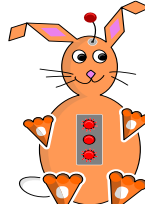


One robot animal has secretly walked around the shop at night. There was a trail of footprints left on the floor.

Question / Challenge



Whose footprint is this ?

- A)  B)  C)  D) 





T2. Bear Selection

Ren is allowed to bring one of his teddy bears to school for show and tell.



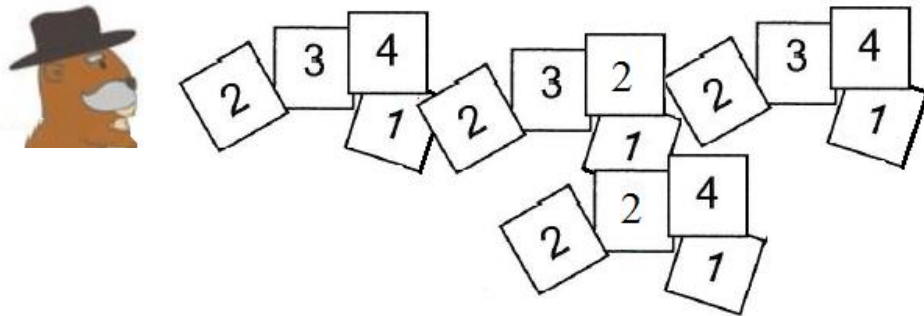
Question / Challenge

Ren chooses a bear that has a star on its foot, and is wearing a scarf or a bow, but not glasses. Which bear does Ren choose?

- A)  B)  C)  D) 

**T3. Cards**

The beaver teacher asked each of his students to write down on a card the number of math problems they solved last week. The pile of cards is the one in the next figure.



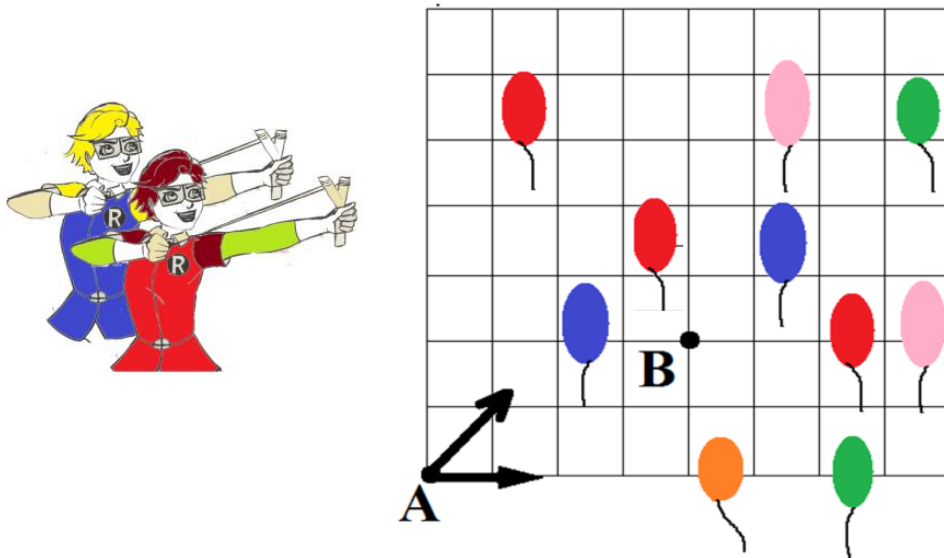
**Question / Challenge**

How many of his students solved only two problems last week?

- A) 4                      B) 5                      C) 6                      D) 7

**T4. Shooting balloons**

Two children will break together at most 5 balloons, if they shoot from point A in the directions indicated by the black arrows.



**Question / Challenge**

At most how many balloons will they break together, if they shoot in the same directions from point B?

- A) 2                      B) 3                      C) 4                      D) 6

**T5. Matching clothes**

Anna the beaver loves to match her clothes.



**Question / Challenge**

Which of the following sequences match the raincoats from the next image to the correct umbrellas?

A) 1→A, 2→B, 3→C

B) 1→B, 2→A, 3→C

C) 1→B, 2→C, 3→A

D) 1→C, 2→B, 3→A

**T6. Postal cards**

On the table there is a pile of four postal cards called: geometric shapes, winter landscape, sunny day and night view, according to what they show. The pile of postal cards is the one in the next image.



**Question / Challenge**

In which order were the four cards placed in the pile?

A) winter landscape, sunny day, geometric shapes and night view

B) geometric shapes, night view, sunny day and winter landscape

C) winter landscape, night view, sunny day and geometric shapes

D) sunny day, night view, geometric shapes and winter landscape

**T7. The elevator**

Three children live in the same apartment building: Mary lives on the 2<sup>nd</sup> floor, John on the 4<sup>th</sup> and Nicholas on the 3<sup>rd</sup> floor. The children want to descend with the same elevator.

**Question / Challenge**

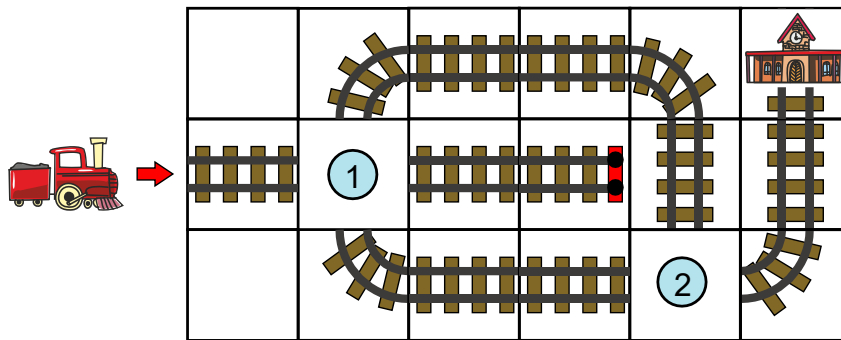
In what order could they get on the descending elevator?

- A) Mary, John and Nicholas
- B) Nicholas, John and Mary
- C) John, Mary and Nicholas
- D) John, Nicholas and Mary

**Tasks T8 – T14 carry 4 points each**

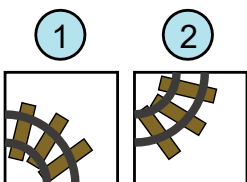
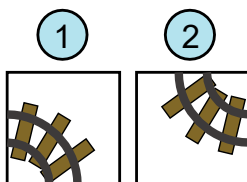
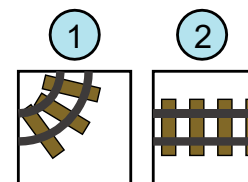
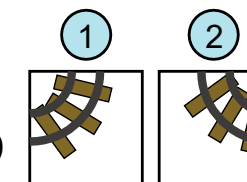
**T8. Train Tracks**

Can you help guiding the train  to the station? 



**Question / Challenge**

Which of the following choice of tracks for each position would make the train arrive safely to the station?

- A) 
- B) 
- C) 
- D) 

**T9. Favorite Animals**

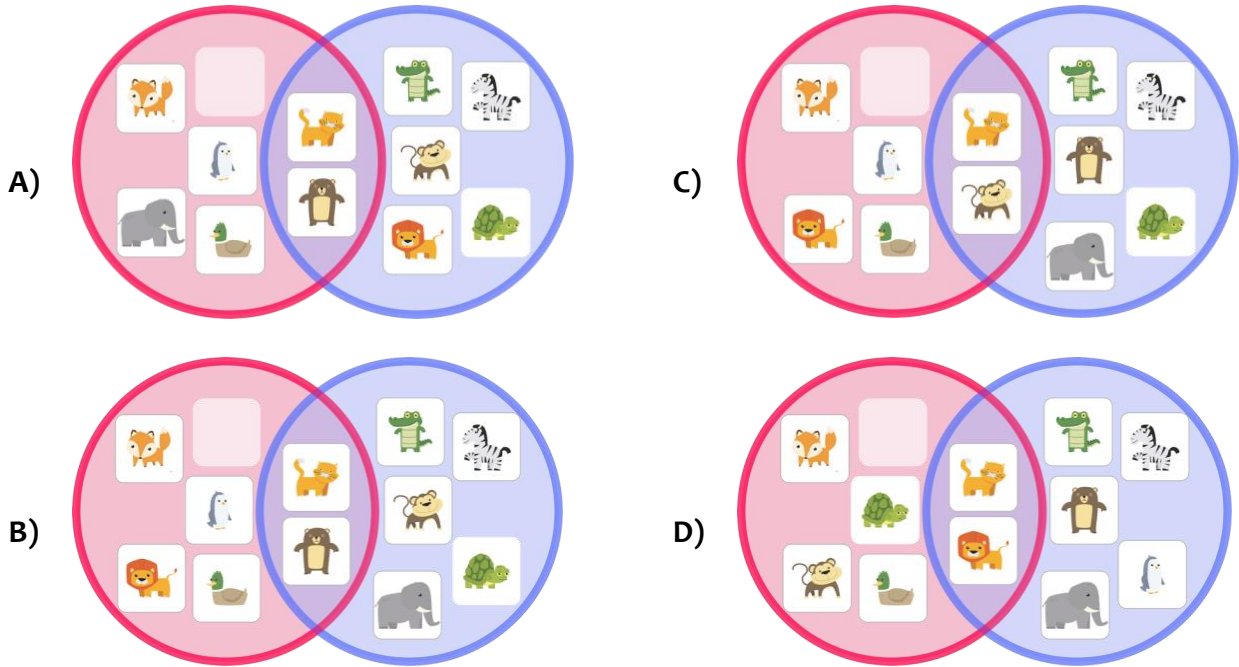
Kim and Mary are talking about which animals they love. They find out that there are some animals that they both love.



They decide to put in the animals in the following two circles.

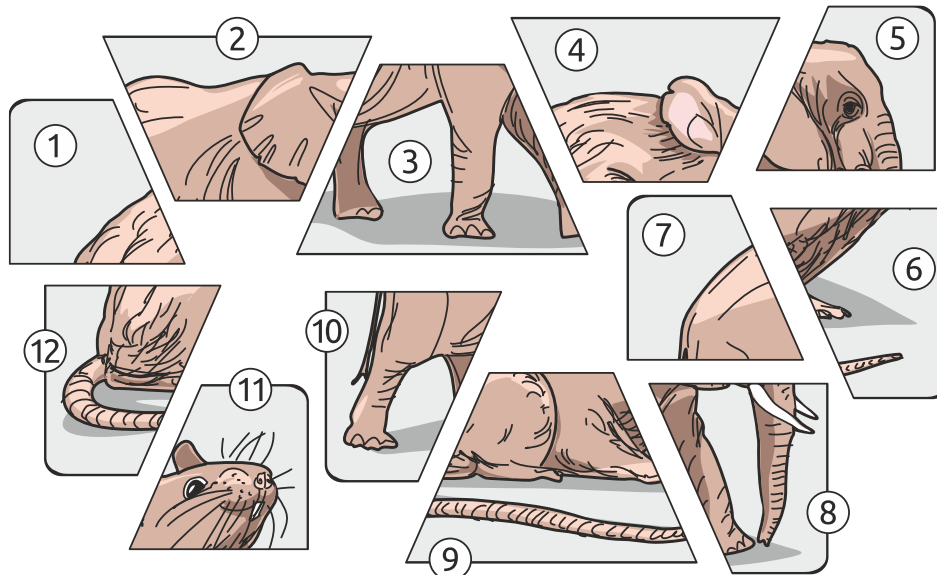
**Question / Challenge**

If we were to place the animals that Mary likes in a pink circle and the animals that Kim likes in a blue circle, which one of the following drawings is correct?



**T10. An elephant and a mouse**

Initially there were two cards one with an elephant and another with a mouse. The cards were cut into 6 pieces each and mixed.



**Question / Challenge**

Which numbers of the card pieces belong to an elephant and which numbers of the card pieces belong to a mouse?

- A) For an elephant: 7, 4, 11, 10, 12, 8 and for a mouse: 1, 2, 5, 10, 9, 6
- B) For an elephant: 7, 2, 5, 10, 3, 8 and for a mouse: 1, 4, 11, 12, 9, 6
- C) For an elephant: 1, 11, 5, 10, 3, 8 and for a mouse: 2, 7, 11, 12, 9, 6
- D) For an elephant: 1, 2, 3, 4, 5, 6 and for a mouse: 7, 8, 9, 10, 11, 12

**T11. Creatures zoo**

A zookeeper wants to allocate creatures to different enclosures in groups of three different creatures. Some creatures eat only fish, others eat only plants:



Because there is too much vegetation, there has to be at least one plant-eating creature in each enclosure.

**Question / Challenge**

How many of the following enclosures do not have a plant eater?



A) 0

B) 1

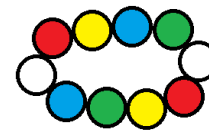
C) 2

D) 3

**T12. Bracelet**



John, the little beaver, broke the bracelet and tries to put the beads in place.



and tries to

**Question / Challenge**

The remnants of the bracelet look like in the picture below



What color will have the first bead which will be added on the right end of the above string?

A) yellow

B) red

C) green

D) blue

**T13. Geometric shapes**

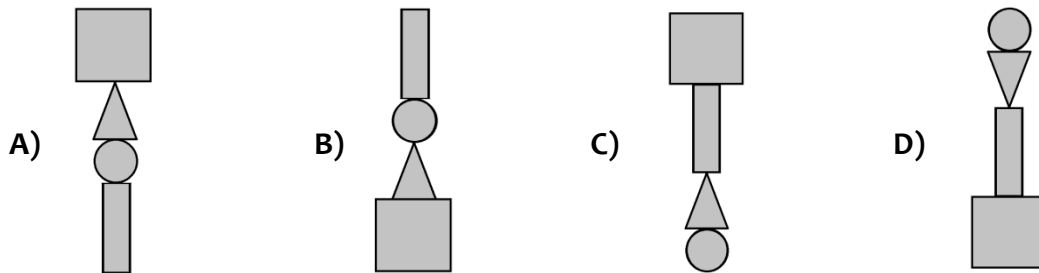
A beaver robot recognizes the following geometric shapes: rectangles (R), squares (S), circles (C) and triangles (T) and one command  
PUT – puts a shape on the top of a pile.

When the robot finishes the commands PUT R, PUT S, PUT C, PUT T it is formed the next pile of geometric shapes:



**Question / Challenge**

Which of the following could be the pile of shapes obtained by the robot after finishing the commands: PUT S, PUT T, PUT C and PUT R?



**T14. The stack**

John the beaver arranged his DVDs in the stack below. A move in the stack – means that a DVD is either pull out or put on.



**Question / Challenge**

At least, how many moves does John have to do in order to remove only the empty DVD from the stack?



- A) 1                      B) 2                      C) 3                      D) 4

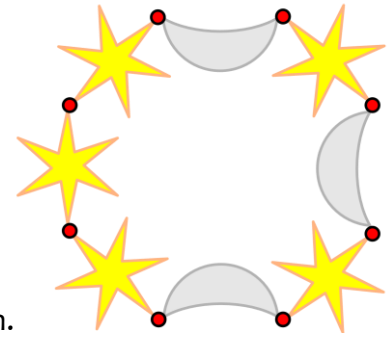
**Tasks T15 – T21 carry 5 points each**

**T15. Stars and moons**

Mary would like a bracelet as shown in the picture.

She therefore gives John the following instructions:

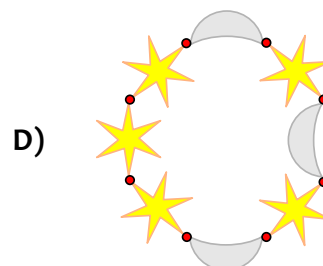
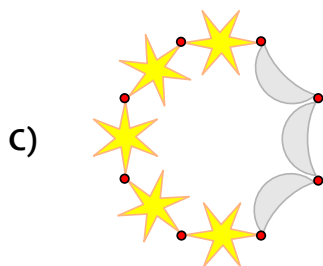
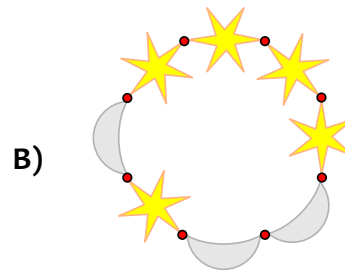
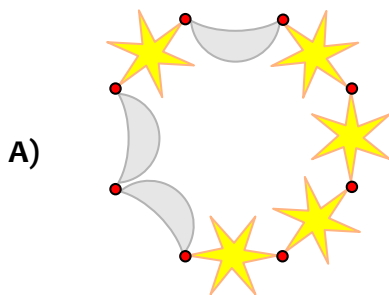
- Take a star (  ) and a moon (  ) and join them together.
- Repeat the previous step two more times.
- Take the three made parts and join them into a single chain.
- Add two more stars at one end of the chain and join both chain ends to make a bracelet.



Unfortunately, if John does not have a picture of the bracelet, he may end up with a bracelet that looks quite different, even if he follows the instructions exactly.

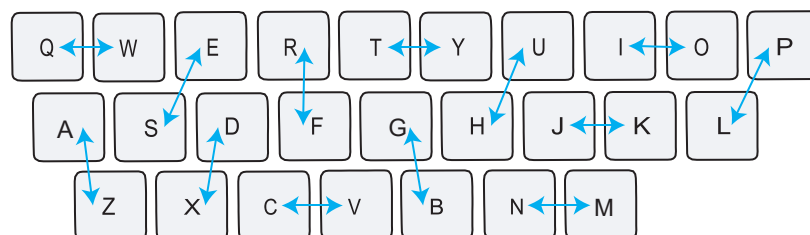
**Question / Challenge**

Three of the four bracelets shown below could be the result of John's work. Which bracelet can NOT be obtained by following Mary's instructions?



**T16. Crypto Keys**

Jan has a special keyboard for writing secret messages. When a key is pressed, a different letter is displayed on the screen, according to the following keyboard map:





The arrows indicate which letter is displayed when a key is pressed. For example, when Jan presses “S”, the letter “E” is displayed on the screen, and when Jan presses “E”, it is the letter “S” which is displayed.

**Question / Challenge**

Jan's screen displays a secret message with the following letters: “NIFMOMB”. What is the original message written by Jan?

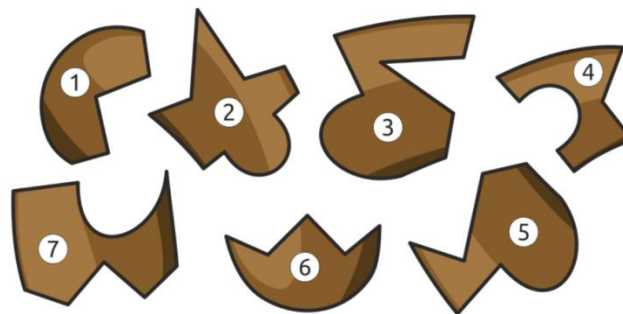
- A) MOLDING      B) MERMAID      C) MORNING      D) MICROBE

**T17. Bebras tail**



**Question / Challenge**

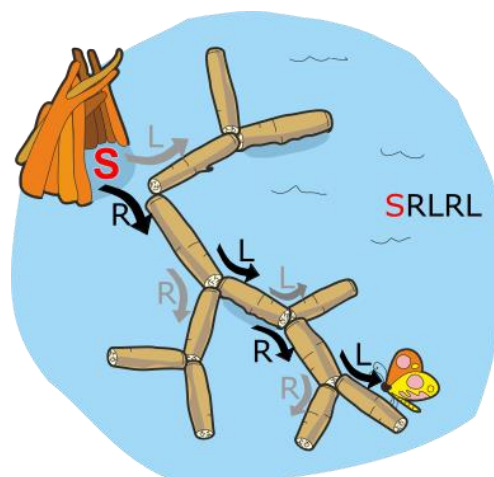
Which shapes do not belong to the tail?



- A) 2 and 3      B) 2 and 6      C) 1 and 5      D) 6 and 7

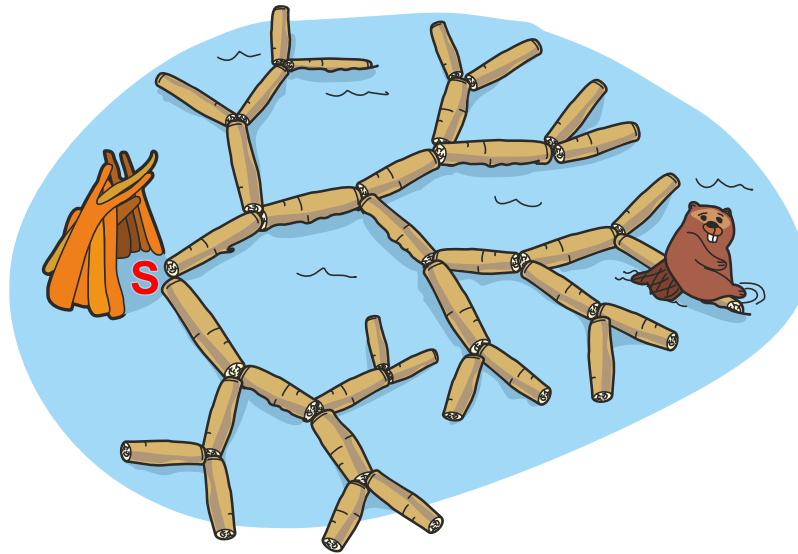
**T18. A tree structure**

Beavers built an incredible structure from logs, starting at their lodge S. A path to each log can be described by using the two commands L (for left) and R (for right). For example, the path to the butterfly is: S R L R L



**Question / Challenge**

Which is the path from the lodge S to the relaxing beaver?



A) SRLRL

B) SLRLLR

C) SLRLRL

D) SLRRRL

**T19. Theater performance**

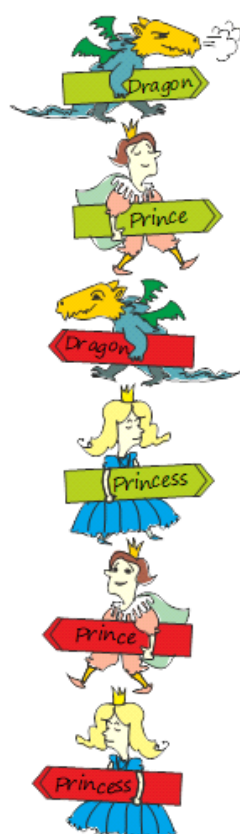
The actors in a fairy-tale play enter and leave the stage according to the order shown in the picture (from top to bottom). The play has two acts and a break between the acts.

**Start of Act 1**



**Break**

**Start of Act 2**



**The End**



The actor enters the stage



The actor leaves the stage

**Question / Challenge**

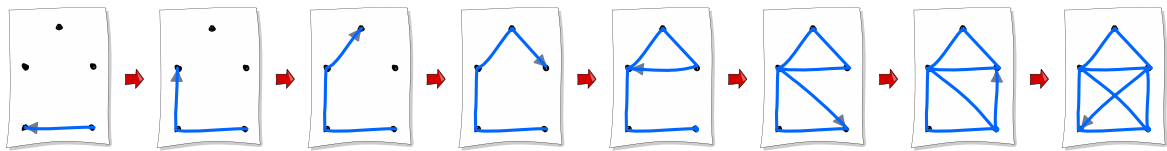
Which statement is **not true**?

- A) The prince and the princess were together on the stage
- B) The king and the dragon were together on the stage
- C) The prince came to the stage after the break
- D) The prince and the dragon were together on the stage

**T20. Connect the Dots**

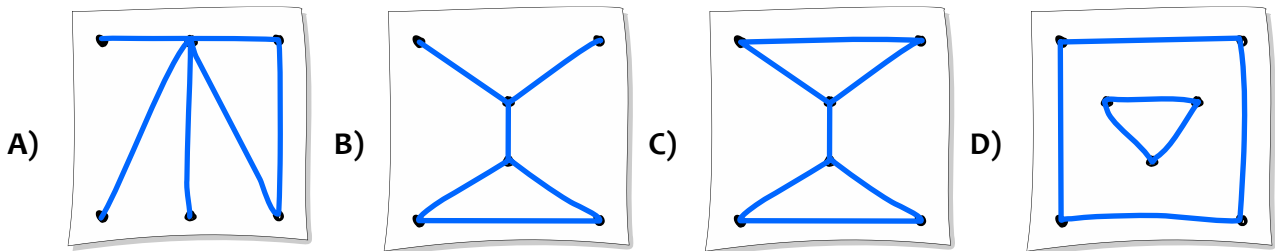
You want to draw pictures without lifting your pen. You create your pictures by drawing lines from one point to the next. However, you can never draw the same line segment more than once.

For example, you can draw a picture of a house in one continuous motion using the following sequence of steps:



**Question / Challenge**

Which of the following pictures can you also draw?



**T21. Treasure Island**

Pirate Pierre lives on Island 1, as shown on the map. He has been given a secret code: B-A-C-A-A-B. This code tells him which bridges to cross to get to a hidden treasure.



Sometimes, the code has a letter for a bridge that is not directly reachable from the island Pierre will be on. In this case, he must ignore that letter and move to the next letter in the code.

For example, if the code was A-B-A, Pierre would cross Bridge A, from Island 1 to Island 2. Then he would stay on Island 2 because there is no Bridge B. Finally, he would go back to Island 1, taking Bridge A again.

### Question / Challenge

The code is B-A-C-A-A-B. On what island is the treasure hidden?

A) 2

B) 3

C) 4

D) 5

