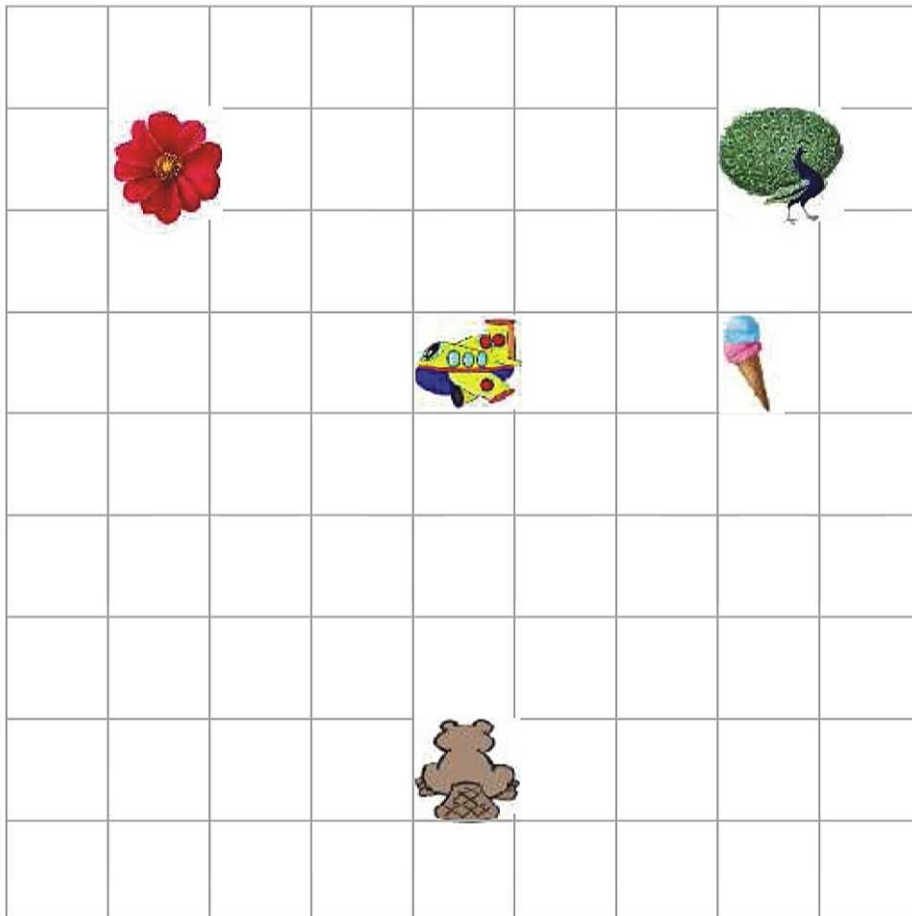


Tasks T1 – T8 carry 3 points each

T1. Beaver walk

You are Beaver, on the picture bellow. Follow the instructions below:

- go forward four steps
- turn left
- go forward three steps
- turn right
- go forward two steps.



You have ended up on:

- A) the airplane
- B) the peacock
- C) the ice cream
- D) the flower

T2. Colourful pencils

On Beaver's table, there are 5 red pencils, twice as many blue ones and 3 black ones. How many pencils are there on the table?

- A) 18
- B) 19
- C) 20
- D) 21

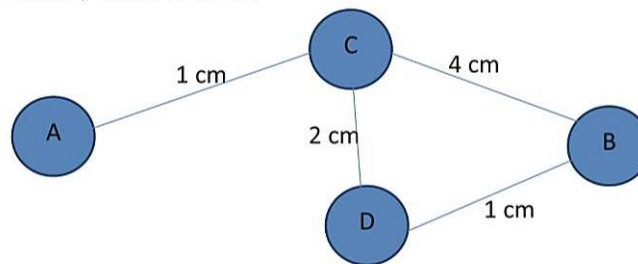
T3. Magic plant

Once, Beaver planted a magic plant. On the first day the plant grows 1 *cm*, and each day grows 1 *cm* more than the previous day. How many days does it take for the plant to reach 10 *cm*?

- A) 3
- B) 4
- C) 5
- D) 6

T4. Shortest path

Using the diagram and following the path of the segments, which is the shortest way, in centimeters, from A to B?



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

T5. Beaver choosing a printer

Beaver wants to buy a printer. Choose the printer with the minimum cost (printer cost plus the cost of toner).



PRINTER A price: 75 euro
Cartridge A price: 24 euro
PRINTER C price: 68 euro
Cartridge C price: 29 euro

PRINTER B price: 83 euro
Cartridge B price: 15 euro
PRINTER D price: 85 euro
Cartridge D price: 11 euro

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

T6. Hand-shakes

In a group there are 4 Beavers. Everybody shakes their hand with each other. How many hand-shakes will there be in total?

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

T7. Fencing a yard

Grandfather's yard is square-shaped. To close the yard, Beaver's grandfather needs 100 meters of fence. What is the length of one side of the court?

- A) 10 meters
- B) 25 meters
- C) 50 meters
- D) 100 meters

T8. Secure password

Beaver has created an email account, beaver@forestschooll.com. Which of the following do you think would be the most secure password?

- A) 12345
- B) Password123
- C) Beaver
- D) B3%e@xWe

Tasks T9 – T16 carry 4 points each

T9. Numbers

How many even numbers are larger than 27 and smaller than 38?

- A) 5
- B) 6
- C) 10
- D) 11

T10. Calculating time

Beaver looks at his watch which shows the time ten minutes after ten (10:10). He wants to know what time his watch will show after 90 minutes.



Help Beaver!

- A) 10:40
- B) 10:50
- C) 11:40
- D) 11:50

T11. Snail on a tree

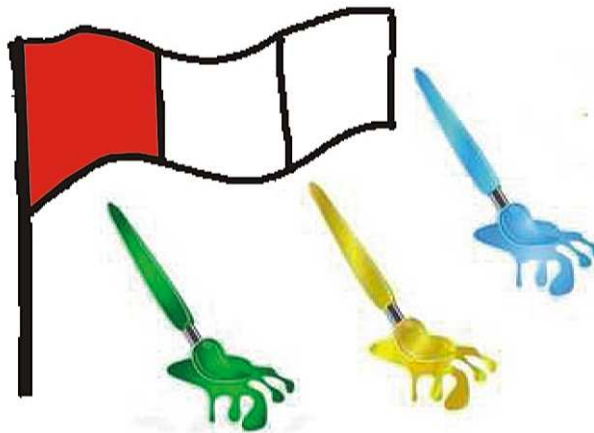
A snail goes up a tree in the following way: he ascends 3 meters during day time and slips back 2 meters at night. How many days will it take the snail to reach the top of the tree that is 5 meters tall?



- A) 5
- B) 6
- C) 7
- D) 8

T12. Designing a flag

Beaver loves to draw. Today he decides to draw and to color a tricolor flag. As shown in the next figure, he starts using red and wants to continue with blue, yellow and green brushes. In how many ways can Beaver continue to color the flag, using the colors he has?



- A) 3
- B) 4
- C) 5
- D) 6

T13. Exchange of liquids in glasses

Beaver has three glasses: the first one has milk in it, the second tea, and the third is empty. He can pour the content of a glass into another empty glass. How many moves does it take for Beaver to switch the milk with tea, using the third empty glass?

- A) 2
- B) 3
- C) 4
- D) 5

T14. Numbering the houses

Beaver loves to play with numbers. He thinks it would be interesting if the houses were numbered in the following sequence: 11, 22, 33, 44, 55, 66, 77, 88, 99, 111, 222, 333, etc., each number using the same digit. What would be the number on the 15th house?

- A) 444
- B) 555
- C) 666
- D) 777

T15. Boys and girls in a class

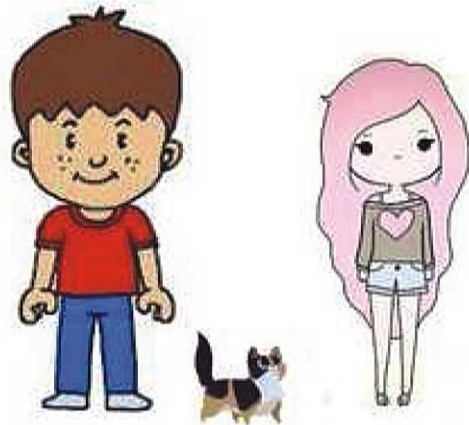
There are 20 children in a class. If the number of boys is larger than the number of girls by 4, how many boys and how many girls are there in the class?

- A) 6 girls and 14 boys
- B) 7 girls and 11 boys
- C) 8 girls and 12 boys
- D) 10 girls and 10 boys

T16. Observing the picture

Look at the picture carefully. Which of the following statements are true?

- A. The boy has blue pants and the cat does not look at the little girl.
- B. The little girl does not have yellow hair and the boy does not have a red shirt.
- C. The little girl does not have black hair and the boy has a red shirt.
- D. There is no dog in the picture and the boy does not have a blue shirt.



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

Tasks T17 – T24 carry 5 points each

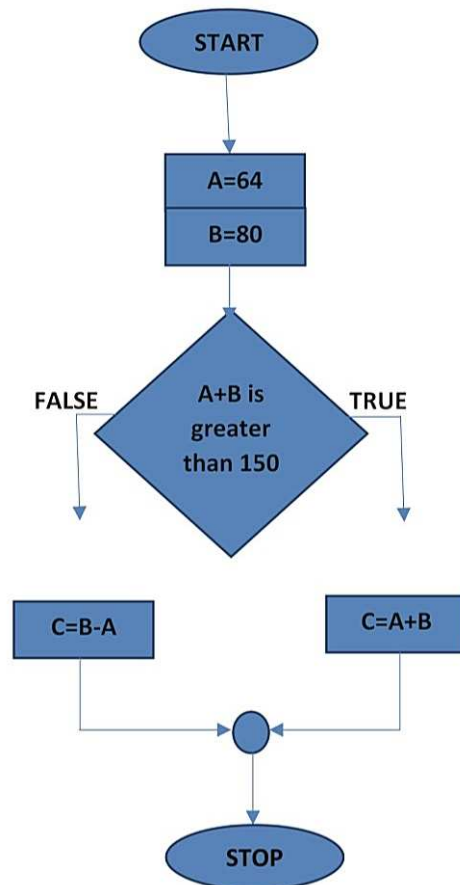
T17. Comparing the heights of beavers

Beaver 1 is A cm tall and Beaver 2 is B cm tall. Which expression is certainly true if Beaver 1 is at least as tall as Beaver 2?

- A) A is greater than or equal to B
- B) A is greater than B
- C) A is less than B
- D) A is equal to B

T18. Flowchart diagram

Using the following diagram, starting from the START block and following the arrows, what will be the value of C when we reach the STOP block?



- A) 15
- B) 16
- C) 17
- D) 144

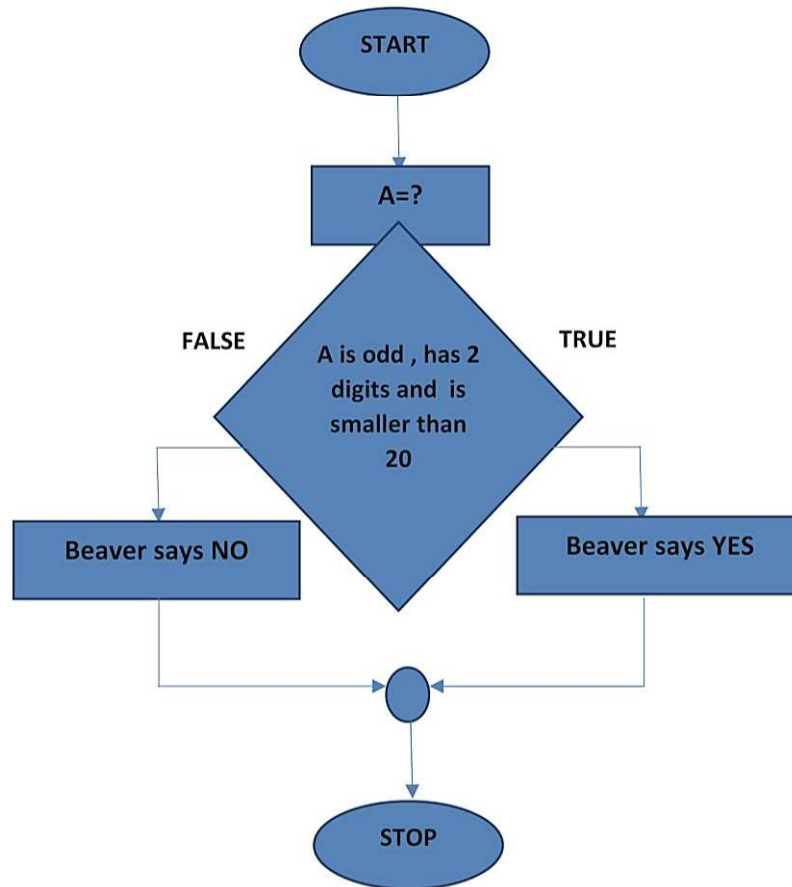
T19. Finding the greatest number

John wants to find out what is the greatest number that can be obtained from the number 3146 if he eliminates only one digit in the number, without changing the order of digits.

- A) 164
- B) 346
- C) 314
- D) 364

T20. Flowchart game

Using the following diagram, starting from the START block and following the arrows, what will be the value of A if we reach the STOP block and Beaver says YES?



- A) 9
- B) 18
- C) 19
- D) 20

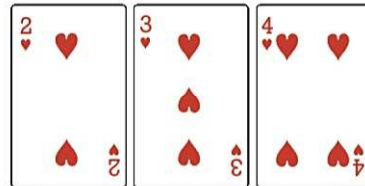
T21. Writing 7 as sum of distinct natural numbers

We can write 6 as sum of distinct natural numbers as follows: 1+2+3, 1+5 and 2+4. In how many ways can we write 7 as sum of distinct natural numbers?

- A) 2
- B) 3
- C) 4
- D) 5

T22. Beaver playing with cards

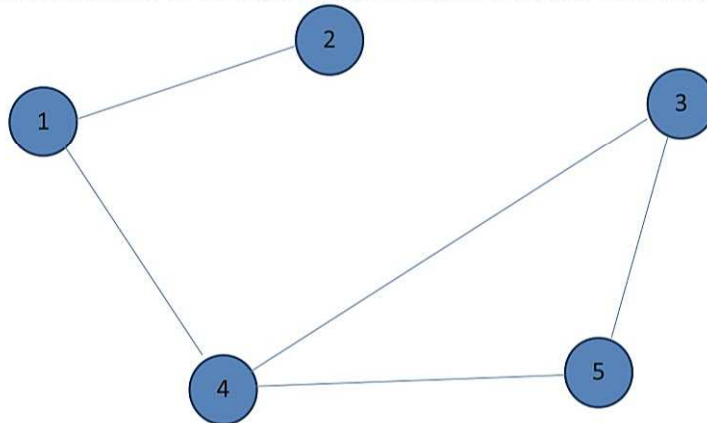
Beaver is playing with cards with the numbers 2, 3 and 4 on them. What is the highest value that can be obtained by multiplying two of the numbers and adding the third?



- A) 14
- B) 15
- C) 16
- D) 17

T23. Building roads between cities

Between cities 1, 2, 3, 4, 5 there are roads as shown in the figure below. How many roads are needed to be built in order to have a road between any two cities?



- A) 2
- B) 3
- C) 4
- D) 5

T24. Combining digits

How many numbers with exactly three distinct digits can be formed with the digits 4, 0 and 5?

- A) 3
- B) 4
- C) 5
- D) 6

