Recognizing the fact that intelligent people should always have some new challenge, some new problems with which to practise and improve their intelligence, we made this   I. Q. TEST.

It includes tasks that are found in the traditional intelligence tests (those heavier) and it takes some knowledge of elementary mathematics.

Test have 20 questions, and to verify correct answers, send us mail on matematiranje@gmail.com and we will send you information about the correct answers.

Here are the tasks:

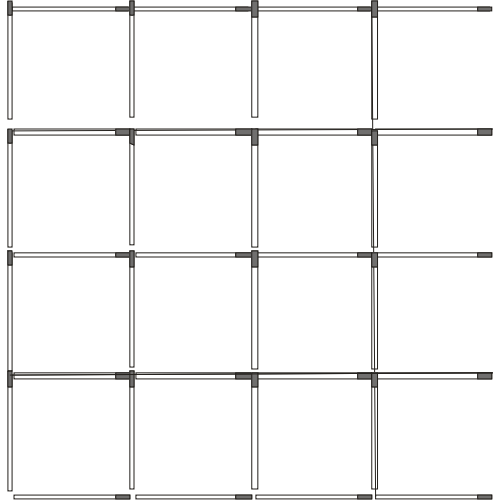**1. Select the character that complements the field with a question mark.**
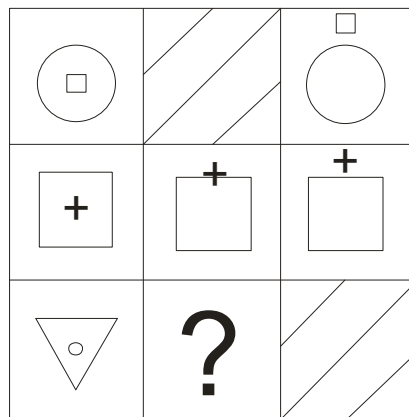
Answers:

2. Find an unknown member of the series:

$$1, \ 4, \ 27, \ ?, \ 3125$$

3. Forty sticks were deployed to form a square 4 * 4 (given in the picture)

How many squares in the picture?

4. When asked what date he was born, Michael answered:

Two days ago I was only 25 years old and next year I will have 28 years.

**What date was Michael born ?** (Only day, without year)

5. The man is holding four cards : 2, 3, 4, 5 but not in that order.

Of course, he wants to put them to be in this order, from smallest to largest, from left to right.
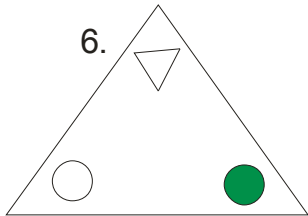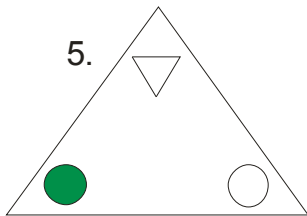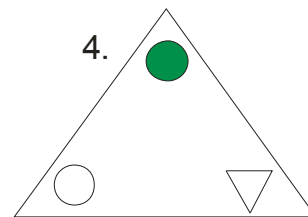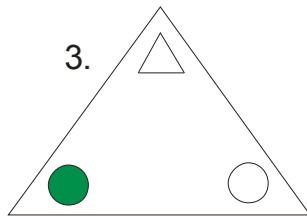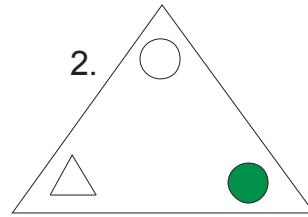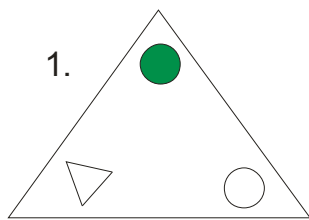
To do this , he do the following : He takes far left card and places it in the beginning (far left) and then

change order of two high cards.

What was the initial order of the cards?

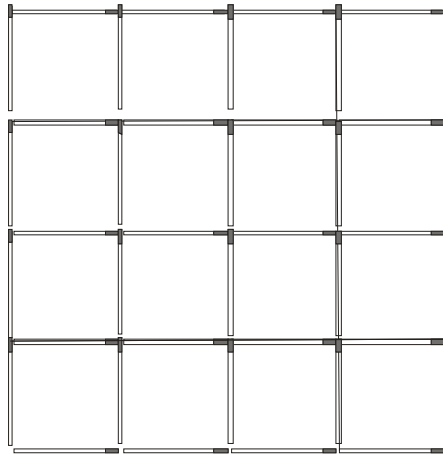**6. Select the character that complements the field with a question mark.**

Answers:

1.

2.

3.

4.

5.

6.
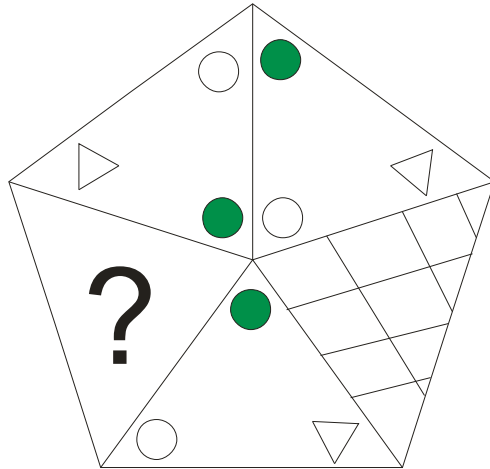
7. Find missing number:

4	4	6
6	8	12
8	6	12
12	20	30
20	12	?

8. Forty sticks were deployed to form a square 4 * 4 (given in the picture)


What is the minimum number of sticks that we need to remove but not to remain even one square?

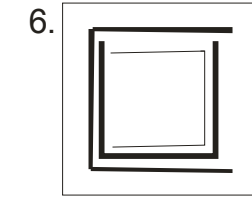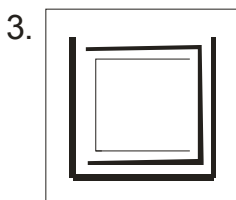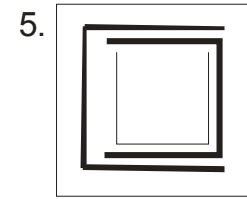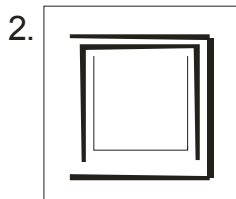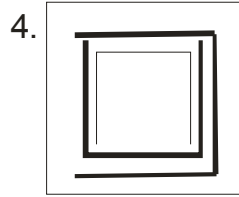## 9. Find a five – digit number that has the following properties:

If we put number 1 in front of the digits of that number (so, we get a six-digit number) it gives as number

which is three times smaller then when we wrote number 1 at the end of that number.

10. **Select the character that complements the field with a question mark.**

Answers:

1.

4.

2.

5.

3.

6.
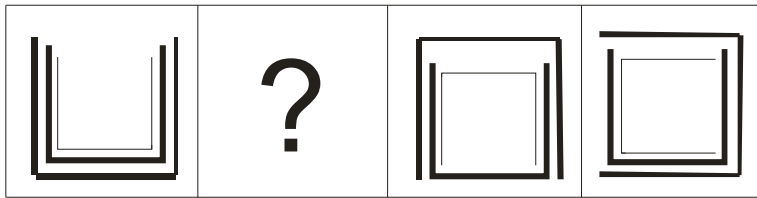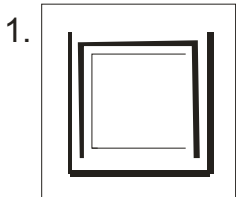
11. **Three gymnasts have T – shirt with numbers 1 , 3 and 6 on them.**

What kind of position they should take to obtained three-digit number which is divisible with 7?

Determine that number.

12. **Throw out number** that is a member of a series , which does not correspond to the law under which series is growing:

$$1, \ 3, \ 7, \ 15, \ 24, \ 31, \ 63,.......$$

13. **The competition was attended by competitors: Alex, Bob, Dex, Michael and John.**

Before the competition , two spectators gave the following forecasts for the order of contestants :

First spectator:

1. **Michael**
2. **John**
3. **Dex**
4. **Alex**
5. **Bob**

Second spectator:

1. **Alex**
2. **Michael**
3. **Bob**
4. **Dex**
5. **John**

After the competition turned out to be the first predictor not only failed to hit the correct placement for eithercompetitor, but did not hit any immediate predecessor for either competitor.

The second predictor was better: he hit exactly the placement of two competitors, and the two gave their immediate predecessors.
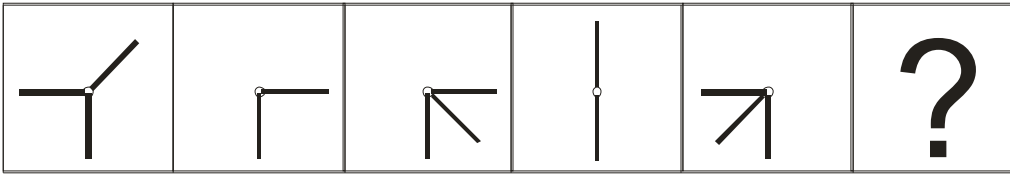
What is the schedule of competitors?

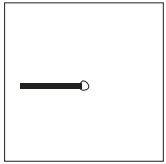**14. Instead of letters put the numbers so that the sum is correct:**

```
        SINUS
        SINUS
     +KOSINUS
     _____
     =TANGENS
```
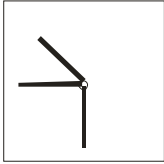
TANGENS = _ _ _ _ _ _ _ ?

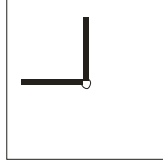**15. Select the character that complements the field with a question mark.**

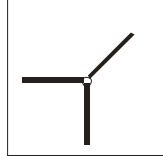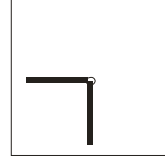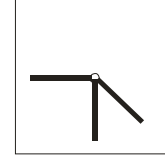Answers:

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

16. Square area $90cm^2$ was cut into three pieces that make up the triangle with different sides

   (all three different sides and of course all three angles different).

   Length of the longest side of the triangle is ____ cm ?

17. **Find missing number :**

   6, 28, 496, ? , 33.550.336 , ...

18. **Scattered cashier cash a check to Mr. Peter. But confusion arises...Instead of euros he gives cents and instead of cents he gives euros to Mr. Peter.**

   Mr. Peter , do not count how much money cashier gave to him and went home.

   As usual, he stop by the kiosk and by newspaper for 5 cents.

   There he became a little suspicious, as it has more money...

   He count the money and finds that there are two times more money than he was supposed to recive by cashing the check.

   For what sum was check written?

19. **Five brothers from one family have birthdays on different days of the week and different month of the year.**
    We know the following informations:

    1. **Peter was born in March, but not on Saturday**
    2. **Alex was not born on Wednesday and was not born on Friday**
    3. **One brother, whose birthday was on Monday was born earlier in the month than Bob and Michael**
    4. **Tin was not born in February and his birthday is on weekends.**
    5. **Michael was not born in December and his birthday is on weekends**
    6. **Brother, whose birthday is in June was born on Sunday.**
    7. **Tin was born before Bob, whose birthday is on Friday.**
    8. **Michael was not born in July.**

    ## What day and month is Alex born?

20. **Using mathematical operations we need to make number 6 using only 1, 1, 1 .**