## Count without a calculator:

a) $450+270+330=$
b) $4,5+2,7+3,3=$
c) $0,45+2,7+3,3=$

Count without a calculator:
a) $450+280-330=$
b) $4,5+2,7-3,3=$
c) $0,45+4,7-3,3=$

Count without a calculator:
a) $750-270-330=$
b) $7,5-2,7-3,3=$
c) $7,85-2,7-3,35=$

## 4.

Count without a calculator:
a) $12 \cdot 100=$
b) $1,2.100=$
c) $0,12 \cdot 100=$
7.

Count without a calculator:
a) $750+27.100=$
b) $7,5+2,5 \cdot 100=$
c) $7,85 \cdot 100+35=$
5.

Count without a calculator:
a) $10.15: 100=$
b) $1,5: 10.100=$
c) $100 \cdot 0,15: 10=$
6.

Count without a calculator:
a) $100: 4: 10=$
b) $0,4: 10: 100=$
c) $40: 100: 10=$

## 9.

Count without a calculator:
a) $75.2=$
b) $75 \cdot 0,2=$
c) $7,5 \cdot 0,2=$


Compare:
Arrange ascending:

2,$7 ; 2,5 ; 2,25 ; 2,65$
13.

Calculate without a calculator:
a) $10 \cdot 100 \cdot 0,01=$
b) $0,01 \cdot 100 \cdot 0,1=$
c) $0,1 \cdot 10 \cdot 0,01=$
16.

Zuzana bought 3 chocolate bars $-0,70 €$ each and Eva bought 7 cookies $-0,30 €$ each.

Who paid more?

Arrange descending:

12,$12 ; 1,2 ; 12,2 ; 2,1$
a) 5,6 and 6,5
b) 6,15 and 6,5
c) 5,3 and 5,30
14.

Calculate without a calculator:
a) $3.5 .4=$
b) 0,5 . $4 \cdot 0,03=$
c) $0,04 \cdot 0,3 \cdot 0,5=$
17.

How much will we pay
if we buy 2 bottles of milk $/ 0,59 €$ each; 1 loaf of bread / 1,20 € and 1 cube of butter / $2,52 € ?$
15.

Calculate without a calculator:
a) $10.40: 1000=$
b) $0,4: 10 \cdot 100=$
c) $4: 100 \cdot 10=$
18.

What is a number 358,695 in place of:
a) tens
b) centesimal
c) decimals



The perimeter of a square is 160 mm . What is the perimeter of an equilateral triangle, that has a side as long as the square?
22.

How many meters of ribbon does a tailor need to sew around a tablecloth with dimensions of $1,2 \mathrm{mx} 0,8 \mathrm{~m}$ ?
25.

What is the perimeter of an isosceles triangle?

Its side is $1,2 \mathrm{dm}$ long and its base is twice shorter than the side.
26.

The perimeter of an equilateral triangle is $0,48 \mathrm{~m}$. What is the length of its side?
27.

How many times does the perimeter of a square increase if we enlarge its side twice?



How many times does the area of a square increase if we enlarge its side twice?
31.

How many square meters of fabrics do we need to sew 10 tablecloths with dimensions $1,2 \mathrm{mx} 0,8 \mathrm{~m}$ ?
34.

How many plants of the vine do we need for a vineyard with dimensions $15 \mathrm{~m} \times 20 \mathrm{~m}$, if we plant 3 pieces of vineyard per $1 \mathrm{~m}^{2}$ ?

Convert to units given in brackets ():
a) $120 \mathrm{~mm}^{2}\left(\mathrm{~cm}^{2}\right)$
b) $0,8 \mathrm{~m}^{2}\left(\mathrm{~cm}^{2}\right)$
c) $2 \mathrm{ha}\left(\mathrm{m}^{2}\right)$

The perimeter of a square is 12 dm .

What is its area?
33.

How much will we pay
his garden with dimensions
$500 \mathrm{~m} \times 300 \mathrm{~m}$ ?
Mowing of $1 \mathrm{~m}^{2}$ costs $3 €$.
for painting one square wall with a 3 m long side, if $1 \mathrm{~m}^{2}$ of art painting costs $12,00 €$ ?
36.

The perimeter of a rectangle is $28 \mathrm{~m}^{2}$.

One side is 70 dm long, how long is the second side in centimeters?



Convert to degrees or degrees and minutes:
a) $120^{\prime}$
b) $320^{\prime}$
c) $1832^{\prime}$
40.

What is the name of a triangle whose sizes of two interior angles are $45^{\circ}$ and $58^{\circ} ?$

What is the name of a triangle whose sizes of two interior angles are $45^{\circ}$ and $35^{\circ}$ ?

What is the name of a triangle whose sizes of two interior angles are $57^{\circ}$ and $33^{\circ}$ ?
42.

What is the size of the adjacent angle to the angle of $32^{\circ}$ ?

What is the size of the APEX angle to the angle of $112^{\circ}$ ?

The right-angle triangle has one interior angle of $52^{\circ}$. What are the sizes of the remaining two angles?
43.
44.

Zuzana goes North.
What is the angle she has to turn if she wants to continue going South?
45.

Eva goes North.
What is the angle she has to turn if she wants to continue going East?


46.

Calculate the size of the marked angles:

49.

Calculate the size of the marked angles:

52.

Calculate the size of the marked angles:

47.

Calculate the size of the marked angles:

50.

Calculate the size of the marked angles:

53.

Which of the pairs of marked angles are VERTEX:

54.

Which of the pairs of marked angles are ADJACENT:

c)


55.
56.
57.
What is the smalle
prime number?
59.

Name all the two-digit prime numbers up to 30

What is the largest twodigit number divisible by 8 ?

Name all the one-digit prime numbers.
60.

What is the largest two-digit number divisible by 3 and 8 too?

Which natural number has only one divisor?
62.

How many rows can 24 students be arranged in?
63.

What remainders can we get when dividing by 13 ??



Which of the given numbers are divisible by 4 and also by 5 : 240, 644, 1 356, 2520, 8 600, 12185

How many divisors has each prime number got?

Complete the number.
The new number must be divisible by 4 : 172*
(say all the solutions)

## 67.

Which of the given numbers are divisible by 9 :

540, 644, 1 206,
2520,8 610, 12185

Which of the given numbers are divisible by 6 :

235, 642, 1 456,
2 250, 5 601, 12180

Complete the number.
The new number must be divisible by 3 : 7 12*
(say all the solutions)

## 71.

How many divisors has number 33 got?
69.

Complete the number.
The new number must be divisible by 6 :

171*
(say all the solutions)
72.

How many two-digit multiples has number 18 got?



How many two-digit numbers can we make of $1,3,5,7$ ?

The numbers can be used
ONCE only.

How many two-digit numbers can we make of $2,4,6,8$ ?

The numbers can be used more than once.

How many three-digit numbers can we make of $1,3,5,7$ ?

The numbers can be used
ONCE only.
76.

In a café, you can have vanilla, caramel, lemon, strawberry, banana, and walnut ice cream. How many times can you get ice cream, if you always choose two different flavors?
79.

Adam has got 5 favorite cars: blue, green, red, white, and orange.
On a trip, he can take only 3 of his cars.
How many choice options has Adam got?
80.

Adam, Erik, Ivan, and Ondrej are four finalists of the table tennis tournament.
How many ways are there for them to be placed on the three winning positions?
78.

Zuzana has got pink, blue, and purple jelly beans in a box.
Gradually, she took 3 jelly beans from the box. How many color options
for taking jelly beans from the box has Zuzana got?

There are 7 members of a hiking club.
How many different ways of choosing a captain and an accountant (from among the members) have they got?



There are 6 players in a chess tournament.
They played everyone with everyone and with revenge.
How many matches did they play?

How many different monograms can be created from letters $\mathrm{P}, \mathrm{R}, \mathrm{S}$ ?
86.

How many handshakes were there at the meeting?

10 managers came and each of them shook a hand with everyone.

Eva and Zuzana are going on a trip. They can't decide whether to go on a trip on foot, by bike or by bus. How many different ways could they go on a trip if each girl decided on the way herself, independently of the other?

## 85.

Three brothers Adam, Erik, and Ivan come home from school one after another.
What is the number of all the possible sequences for the brothers to come home?

## 88.

How many two-digit numbers can we make of
$0,1,2,3$ ?
The numbers can be used ONCE only.
89.

## 

How many ODD two-digit numbers can we make of

$$
1,2,3,4 ?
$$

The numbers can be used ONCE only.

## 87.

How many hugs were there during the meeting of four friends who met after a long time and hugged each other just once?

## 90.

How many EVEN twodigit numbers can we make of $1,2,3,4$ ?

The numbers can be used more than once within a number.



Oh! What a pity!
Go back to START!
94.

FREEZE!
Stop for one round.
94.

Praise yourself!
Tell other players what you are good at.
95.

Pass a compliment to the player on your right.
95.

Roll your dice again and move forward.
98.
99.

With your finger, draw a little heart on the back of the player on your left.

Invent a rhyme to the word "mathematics".
97.



Stand up.
Spin 5 times in one place and then try to go 5 steps forward.

Sing your favorite song.
104.

Stand up.
Do 5 squats with the pencil case on your head.

Go and wash your hands with soap.
107.

Imitate your favorite animal. Can your partners guess?

Close your eyes and draw a flower.

Repeat 3 times as quickly as possible: „Four furious friends fought for the phone."

Walk around the classroom like a duckling.
108.

Say your (full) name from the back.



