

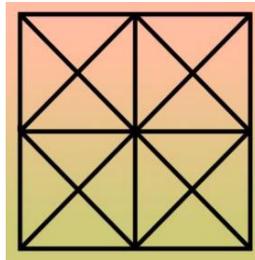


**1<sup>st</sup> grade**

1. Find the largest possible value of the following expression if letters denote digits (the same letters denote the same digits, different letters denote different digits):

$$\mathbf{F+E+E+M+M+M+O+O+O+O=?}$$

2. It is now the year 2021. In the record of this number, three consecutive digits are used: 0, 1, and 2. What is the next year whose record has the same property?
3. Aslan had 10 sticks. He broke three of them in half. How many sticks does he have now?
4. How many squares are there in the picture?

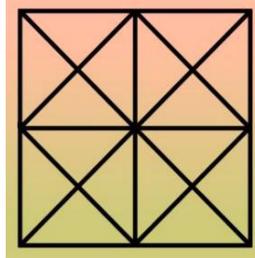


5. In a row there are 23 numbers such that the sum of any two adjacent numbers is 17. The second number is 6. What is the last number?
6. Four friends were figuring out what day of the week it was.  
Farhad said: "The day before yesterday was Sunday."  
Erzhan said: "The day after tomorrow will be Thursday."  
Magzhan said: "Yesterday was Monday."  
Olzhas said: "Today is Wednesday." One of them was wrong. Who?
7. Dauren's and his sister's ages combined are 16. Dauren's and his brother's age combined are 5 years more than that. How old is his sister, if his brother is 12 years old?
8. Alua buys pencils and pens. With the money available, she can buy 24 pencils or 12 pens. But she wanted to buy the same number of pencils and pens. How many will she buy?
9. Amir and Ansar travel by train. Amir rides in the seventeenth carriage from the beginning of the train, and Ansar - the fourteenth from the end. It turned out that they were traveling in the same carriage. How many carriages are there on the train?
10. On a dice, the total number of points on any two opposite faces is 7. Jazira glued a column of 3 such dices together and counted the total number of points on all outer faces. What's the biggest number she could get?



**2<sup>nd</sup> grade**

1. How many squares are there in the picture?



2. A square with a side of 9 cm was bent from a piece of wire. Then the wire was unbent and a triangle with equal sides was bent from it. What is the length of a side of a triangle?
3. In recording the date of yesterday 12/12/21, only the digits 1 and 2 are used. How many dates in this year can be written using only these digits?
4. Four friends were figuring out what day of the week it was.  
**F**arhad said: "The day before yesterday was Sunday."  
**E**rzhan said: "The day after tomorrow will be Thursday."  
**M**agzhan said: "Yesterday was Monday."  
**O**lzhas said: "Today is Wednesday." One of them was wrong. Who?
5. They paid \$ 28 for 6 cartons of milk and 2 ice creams. What's the price of a carton of milk if it's \$2 more expensive than the ice cream?
6. The school cafeteria sells delicious donuts, which Arsen loves very much. Damir ate half of all the donuts, after which the canteen worker set aside two donuts for Arsen. After that, Aidana came to the dining room and ate half of the remaining donuts. Then the canteen worker put aside three more donuts for Arsen, and the donuts ran out. How many donuts were there originally?
7. 220 students from Almaty and Nur-Sultan arrived at the summer camp. There were 120 boys among the arrivals, of which 45 were Almaty residents. There were 53 girls among the students who arrived from Nur-Sultan. How many girls arrived from Almaty?
8. Sitting at the window of the train carriage, the boy began to count the telegraph poles. He counted 9 poles. How far has the train traveled during this time, if the distance between the poles is 40 m?
9. The mother is 4 times older than her daughter, and together their ages are 480 months. How old is the mother now?
10. A three-digit number begins with the digit 5. This digit has been moved to the end of the number. The resulting number turned out to be 288 less than the original. What is the sum of the digits of this number?



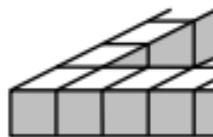
**3<sup>rd</sup> Grade**

1. In a five-story building, Arman lives above Aset, but below Ulan, and Samat lives below Aset. What floor does Arman live on if Samat lives on the second floor?
2. The twins Ayman and Sholpan lie at the same time only on Saturday. On other days, one of them lies, and the other speaks the truth. Ayman said, "Today is Saturday." Sholpan answered: "Saturday was yesterday." What day of the week is it today?
3. The three sisters of the triplets guessed a three-digit number, and their brother guessed a four-digit number. After they wrote their numbers in a row in some order, the number was 5041202010215. Find the brother's number.
4. Sitting at the window of the train carriage, the boy began to count the telegraph poles. He counted 13 poles. How far has the train traveled during this time, if the distance between the poles is 50 m?
5. In 4 years, Azamat will be 2 times older than 4 years earlier. How old is he now?
6. In the first week after his birthday, the Sultan's uncle gave him money, which the Sultan put in a new piggy bank. Every week thereafter, the Sultan put aside \$ 3 in his piggy bank. By the end of the ninth week after his birthday, the Sultan had tripled the amount his uncle had given him. How many dollars did the Sultan have by the end of the ninth week?
7. The school cafeteria sells delicious donuts, which Arsen loves very much. Damir ate half of all the donuts, after which the canteen worker set aside two donuts for Arsen. After that, Aidana came to the dining room and ate half of the remaining donuts. Then the canteen worker put aside three more donuts for Arsen, and the donuts ran out. How many donuts were there originally?
8. Solve the rebus:

$$\mathbf{FEMO+FE+M+O=2021}$$

What number is hidden by the letter **O**?

9. Three boxes contain the same number of apples. If you take out 60 apples from each box, then in all boxes there will be as many apples as before there were in one box. How many apples were in each box?
10. Using 32 identical cubes, Alua built a fence around a square area (part of this fence is shown in the picture). How many more of these cubes will she need to fill the fenced area?





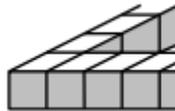
4<sup>th</sup> Grade

1. The three sisters of the triplets guessed a three-digit number, and their brother guessed a four-digit number. After they wrote their numbers in a row in some order, the number was 5041202010215. Find the brother's number.
2. Amir and Ansar travel by train. Amir rides in the seventeenth carriage from the beginning of the train, and Ansar - the fourteenth from the end. It turned out that they were traveling in the same carriage. How many carriages are there on the train?
3. The family has many children, but there is only one girl. One day she noticed that her age was equal to the sum of the ages of her brothers. Three years later, she was surprised to realize that her age was 12 years less than this sum. How many children are there in this family?
4. In the first week after his birthday, the Sultan's uncle gave him money, which the Sultan put in a new piggy bank. Every week thereafter, the Sultan put aside \$ 3 in his piggy bank. By the end of the ninth week after his birthday, the Sultan had tripled the amount his uncle had given him. How many dollars did the Sultan have by the end of the ninth week?
5. Solve the rebus:

$$\mathbf{FEMO+FE+M+O=2021}$$

What number is hidden by the letter **O**?

6. Using 32 identical cubes, Alua built a fence around a square area (part of this fence is shown in the picture). How many more of these cubes will she need to fill the fenced area?



7. 1 eraser and 2 pencils cost 148 tenges. 2 erasers and 1 pencil cost 122 tenges. How much tenge do a set of an eraser and a pencil cost?
8. How many four-digit numbers are there that have the sum of the first three digits equal to 4 and the sum of the last three digits equal to 9?
9. Knights and liars live on the island. Liars always lie, and knights always tell the truth. There are 30 aborigines (knights and liars) sitting at a round table. Each said, "Both of my neighbors are liars." It turned out that among all the pairs of aborigines sitting next to each other, there are exactly 4 pairs of liar-liar. Find the number of knights at the table.
10. Ansar and Amir went out to meet each other, and at that moment Ansar's puppy ran towards Amir. When it reached Amir, it immediately turned and ran to Ansar. And so it ran between them until the meeting. How many kilometers did the puppy run if the speeds of Ansar, Amir, and the puppy are 4 km / h, 6 km / h, and 9 km / h, and the distance between Ansar and Amir at the very beginning is 10 km?



5<sup>th</sup> Grade

1. Solve the rebus:

$$\mathbf{FEMO+FE+M+O=2021}$$

What number is hidden by the letter **O**?

- The family has many children, but there is only one girl. One day she noticed that her age was equal to the sum of the ages of her brothers. Three years later, she was surprised to realize that her age was 12 years less than this sum. How many children are there in this family?
- About a three-digit number, all the numbers of which are different, two statements are given: "This number has at least one digit that is a multiple of 3", "This number has a five and a seven." What is the largest number for which both statements are false?
- How many integers from 2000 to 2500 have four distinct digits in ascending order? (For example, 2347)
- Suppose  $a * b$  means  $a + 2b$ . What is the value of  $x$  if

$$\mathbf{3 * (5 * x)=21.}$$

- 1 eraser, 2 pencils, and 3 notebooks cost 238 tenges. 3 erasers, 2 pencils, and 1 notebook cost 322 tenges. How much does a set of an eraser, a pencil, and a notebook cost?
- Knights and liars live on the island. Liars always lie, and knights always tell the truth. There are 30 aborigines (knights and liars) sitting at a round table. Each said, "Both of my neighbors are liars." It turned out that among all the pairs of aborigines sitting next to each other, there are exactly 4 pairs of liar-liar. Find the number of knights at the table.
- The bank card password consists of four digits from 0 to 9, while repeating the numbers is allowed. If Rinat does not like it when only digits from 0 to 5 are used in the password, then how many passwords can one create for Rinat's bank card?
- To overcome 240 kilometers between the cities of Nur-Sultan and Karaganda, Damir travels for half an hour by bus and two hours by train. The train travels 20 km / h faster than the bus. The bus and train are moving at a constant speed. What is the bus speed in km / h?
- The rectangle is made up of 6 squares. The side of the smallest square is 2 cm. What is the area of this rectangle?

