Exercises.

1. Fill in the empty cell in the table:

dividend	a	21		42	95
divisor	b	7	9		5
quotient	c		7	3	

Check the formula $a = b \cdot c$ for each column in the table.

2. Fill in the empty cell in the table:

dividend	a	29		46	94
divisor	b	7	9		9
quotient	c	4	7	3	
remainder	r		5	1	4

Check the formula $a = b \cdot c + r$ for each column in the table.

3. 85 and 187 are both divisible by 17. Will their sum be divisible by 17?

4. The remainder of $1932 \div 17$ is 11, the remainder of $261 \div 17$ is 6. Is
$$2193 = 1932 + 261$$
divisible by 17? Is it possible to say without division?

5. Without calculating, establish whether the sum is divisible by a number:
$a.\ 25 + 35 + 15 + 45$ $by\ 5$; $b.\ 14 + 21 + 63 + 49$ $by\ 7$
$c.\ 18 + 36 + 55 + 90$ $by\ 9$;

6. How many vans are needed to take 55 students on a field trip if a van can take 12 students?

7. Show that among any three consecutive natural numbers (consecutive numbers are numbers that follow each other continuously, from smallest to largest, like 1,2,3 or 21,22,23, or 151, 152, 153) there will be one divisible by 3.

8. The Johnsons family traveled from Stony Brook to Chicago. They covered the distance between these cities of 846 miles in 3 days. On Friday and Saturday, they covered 620 miles, on Sunday 53 miles more than on Saturday. How many miles did they drive on each of those days?

9. Robert did his math assignment but he stained his notebook. Each drop of ink covers the same digit, which is greater than 0. Please, restore his homework!

$$(\blacksquare + \blacksquare + 1) \times \blacksquare = \blacksquare\blacksquare$$

10. Fill the empty spaces in the table below:

a	56		36		72
b	8	6		5	
a · b		108	144		
a : b				14	24