Math 4a. Classwork 5.

## Warm up:



$   \begin{array}{r}     100 - 77 \\     \cdot 3 \\     + 51 \\     \underline{:12} \\     ?   \end{array} $	$   \begin{array}{r}     20 \cdot 7 \\     -50 \\     \vdots 5 \\     +32 \\     ?   \end{array} $	$200:4 + 70 \\ \cdot 5 \\ -240 \\ ?$	$23 + 47 \\ :7 \\ \cdot 16 \\ -90 \\ ?$
$ \begin{array}{r} 620 + 190 \\                                    $	$4 \cdot 40 + 260 \\ : 6 \\ -45 \\ ?$	$   \begin{array}{r}     100 - 10 \\     \cdot 90 \\     + 1900 \\     \underline{:100} \\     ?   \end{array} $	$54:6 + 34 \\ \cdot 2 \\ - 56 \\ ?$

## **Exercises:**

1.	Find al	l divisors	of			
	6;	7;	14;	18;	70;	60.
2.	Is the r	number				
				234567234123 · 3		
	Divisit	ble by 3?				
3.	Is the r	number				
				2345	5672341	23 • 33
	Divisit	ole by 3?				

4. Is the number

234567234123 · 33

Divisible by 11?

5. We know, that the number *a* is divisible by 3. Will the number  $5 \cdot a$  is divisible by 5? By 3?

- 6. Prove that 35 is a divisor of 560, 18 is not a divisor of 560.
- 7. Is number a divisible by number b? if yes, find the quotient.

1. $a = 2 \cdot 2 \cdot 3 \cdot 7 \cdot 7$ ,	$b = 2 \cdot 2 \cdot 11$
2. $a = 2 \cdot 3 \cdot 5 \cdot 13$ ,	$b = 5 \cdot 13$
3. $a = 3 \cdot 5 \cdot 5 \cdot 11 \cdot 17$ ,	$b = 3 \cdot 5 \cdot 17$
4. $a = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 \cdot 19 \cdot 23$ ,	$b = 2 \cdot 2 \cdot 3 \cdot 5$
5. $a = 2 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 5 \cdot 11 \cdot 13$ ,	<i>b</i> = 405
$6. \ a = 2 \cdot 3 \cdot 7 \cdot 11 \cdot 13 \cdot 29,$	b = 2002

- 8. A florist has 36 roses, 90 lilies, and 60 daisies. What is largest number of bouquets he can create from these flowers evenly dividing each kind of flowers between them?
- 9. There are less than 100 apples in a box. They can be evenly divided between 2, 3, 4, 5, and 6 kids. How many apples are there in the box?



- 10. Two buses leave from the same bus station following two different routes. For the first one it takes 48 minutes to complete the roundtrip route. For the second one it takes 1 hour and 12 minutes to complete the round trip route. How much time will it take for the buses to meet at the bus station for the first time after the have departed for their routes at the same time?
- 11.Boxes that are 30 cm tall are being piled next to boxes that are 40 cm tall. What is the least height at which the two piles will be the same height?
- 12.Numbers 100 and 90 were divided by the same number. In the case of 100, the remainder is 4, in the case of 90, the remainder is 18. What is the divisor?
- 13. Can you find out which numbers are multiplied?