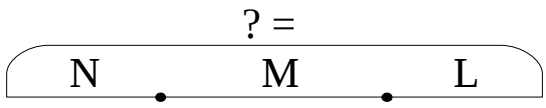
Homework for Lesson № 1

1 **In your notebook** make auxiliary drawings and solve the equations:

$x - 124 = 76$ $y + 28 = 132$ $500 - z = 134$

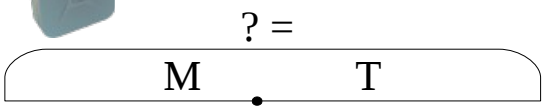
2 Use the drawings to solve the word problems

A. Nick has 12 pencils, Mike has 7 pencils, Lisa has 8 pencils. How many pencils do the three kids have altogether?



B. There are 12 fish in an aquarium. The second aquarium has 5 more fish than the first. How many fish are in the third aquarium if there are 50 fish in all three?

?=



C. A taxi driver used 12 gallons of gasoline on Monday. This is 4 gallons less than the amount of gasoline he used on Tuesday. How many gallons of gasoline did he use in those two days?

3 Determine the order of operations in the expressions.

$m + (n - k) - (t + k)$ $m + (n - k - t) + k$

$(m + n) - k - (t + d)$ $m + n - (k - t + k)$

4 Compare:

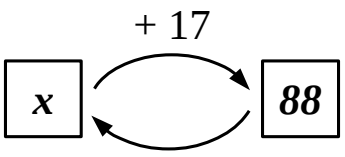
$254 - a \square 204 - a$ $m - 74 \square m - 47$ $c + d \square d + c$

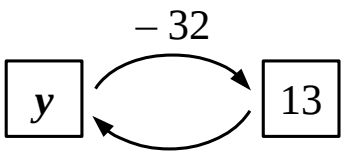
$b - 287 \square b - 56$ $210 + n \square 215 + n$ $440 - k \square 540 - k$

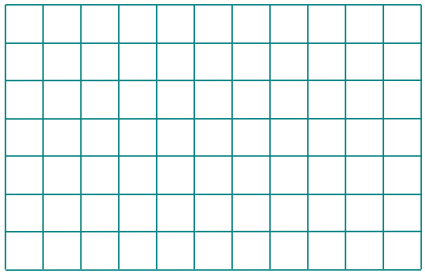
5 Compare:

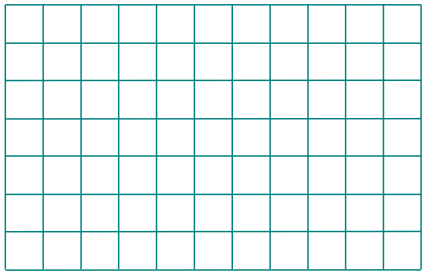
$28 - 5 \square 28 - (5 + 1)$	$p - 8 \square p - (8 + 3)$	$32 - x \square 32 - (x + 2)$
$28 - 5 \square 28 - (5 - 2)$	$p - 8 \square p - (8 - 1)$	$26 - y \square 26 - (y - 3)$
$28 - 5 \square 28 - (5 + a)$	$q - 8 \square q - (8 + m)$	$q - a \square q - (a + m)$
$28 - 5 \square 28 - (5 - b)$	$q - 8 \square q - (8 - n)$	$q - b \square q - (b - n)$

6 Write the appropriate equations and solve them.









7 Determine the order of operations and evaluate the expressions:

$215 - (38 + 169) =$	$500 - (239 + 85) + 457 =$
$(357 + 194) - 263 =$	$(304 - 26) - (72 + 168) =$

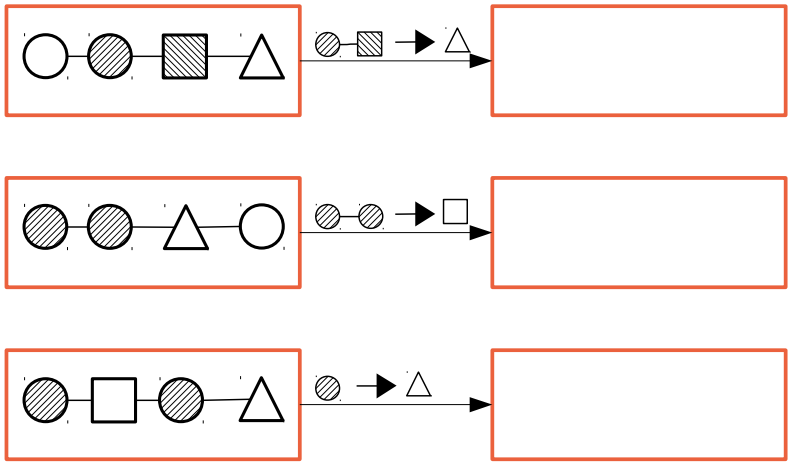
8 Express in decimeters and centimeters:

54 cm = ___ dm ___ cm	80 cm = ___ dm ___ cm	122 cm = ___ dm ___ cm
240 cm = ___ dm ___ cm	66 cm = ___ dm ___ cm	500 cm = ___ dm ___ cm

9 Express in cm:

2 dm 7 cm = ____ cm	8 dm 5 cm = ____ cm	80 dm 5 cm = ____ cm
24 dm = ____ cm	66 dm = ____ cm	30 dm = ____ cm
1 m 3 dm 4 cm = ____ cm	4 m 6 dm 1 cm = ____ cm	2 m 7 dm = ____ cm
4 m 34 cm = ____ cm	6 m 5 cm = ____ cm	1 m 23 cm = ____ cm

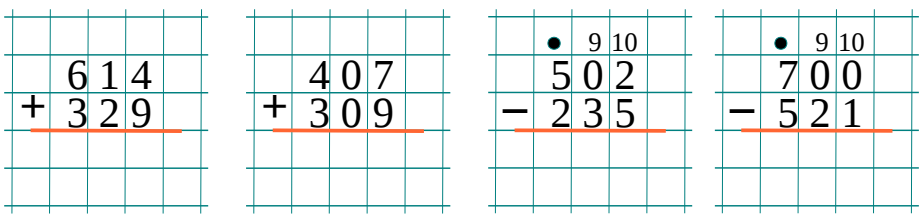
10 Replace:



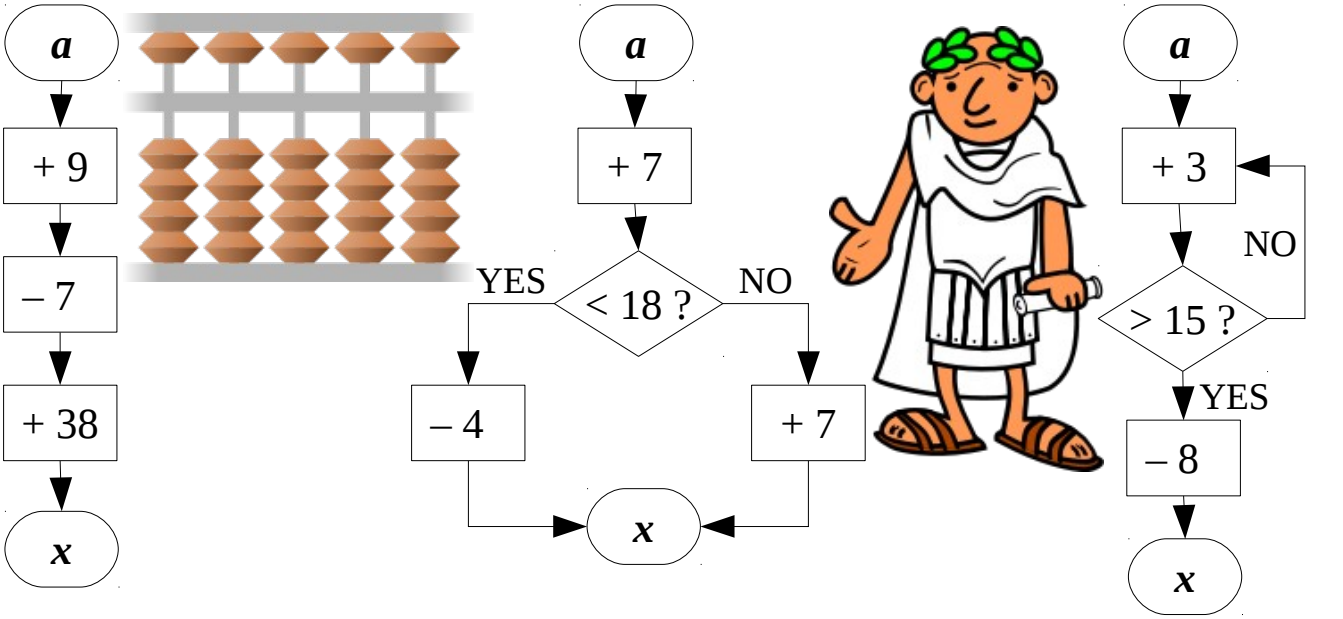
11 Transform the equations by doing replacements according to the instructions:

$12 - x:2 = 4$	$x : 2 \rightarrow z$	
$t = 5$	$t \rightarrow u \cdot 3$	
$7 + m + n = 16$	$q = m + n$	
$12 : x + 7 = 10$	$12:x = t$	

12 Calculate:



13 Perform the sequences of actions according to the algorithms on the drawing below. Which of these algorithms could be called ***linear, or branching, or cyclic***?



a	5	14	20
x			

a	5	14	20
x			

a	5	14	20
x			

14 Determine the sequence of operations in the expressions:

$a + (b - c) + (d + m) - k$ $\qquad$ $a + c - b + d - p + q$

$(m - k) + (x - y) - (a + c)$ $\qquad$ $m - (a + b - c) + (m - n)$

15 Insert the missing digits and inspect you answers:

$$\begin{array}{r} 3\,\square\,5 \\ +\ \square\,1\,\square \\ \hline 7\,3\,9 \end{array} \qquad \begin{array}{r} \square\,2\,\square \\ +\ 5\,\square\,3 \\ \hline 7\,4\,1 \end{array} \qquad \begin{array}{r} \square\square 6 \\ -\ 3\,4\,\square \\ \hline 5\,4\,2 \end{array} \qquad \begin{array}{r} 6\,2\,\square \\ -\ \square\square\,3 \\ \hline 2\,6\,7 \end{array}$$

Check: