## Math 4 b. Homework 2.



1. (a) Find equal expressions.

Example: 2 + (798 + 15) = (2 + 798) + 15

$$(11 + 74) + 18 + (89 + 26)$$

$$(34 + 166) + (18 + 72)$$

$$34 + 18 + 166 + 72$$

$$(97+3)+95$$

$$21 + 23 + 25 + 27 + 29$$

$$(11+89)+(74+26)+18$$

$$97 + (3 + 95)$$

$$(21 + 29) + (23 + 27) + 25$$

- (b) What is the most convenient way to calculate, left of right? Calculate using the most convenient way.
- (c Arrange the numbers on the right in the ascending order and you will get the name of the first European explorer who reached India by sea.
- 2. For each expression on the left, find the one on the right, which gives the same answer. Mark them with identical symbols.

$$43 - (32 + 5) =$$

$$(43-23)+5=$$

$$28 + (2 + 19) =$$

$$(56 - 26) + 38 =$$

$$(28+2)+19=$$

$$(43-23)-5=$$
 $56+(38-26)=$ 

3. Calculate in the most convenient way:

$$345 + 18 + 15 =$$

$$456 + 18 + 14 =$$

B 128 - (28 + 4) =

$$949 - (5 + 49) =$$

$$456 - (356 + 99) =$$

 $(9 \cdot 2) \cdot 5 =$ 

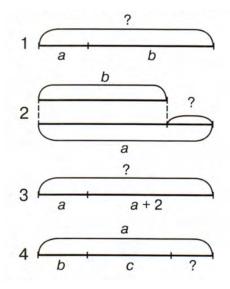
$$3 \cdot 5 \cdot 6 \cdot 2 =$$

$$2 \cdot 2 \cdot 5 \cdot 5 \cdot 5 =$$

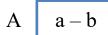


Arrange the letters in the descending order to get the name of famous Italian explorer.

4. For each diagram on the left create a word problem about your favorite cartoon characters and select suitable expression on the right, which solves your problem.







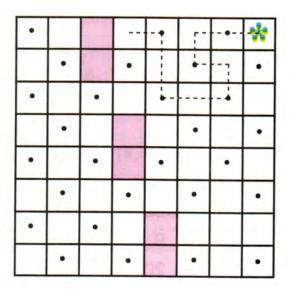
$$B \qquad a-b-c$$

$$C = a + b$$

$$D \quad a + (a+2)$$

5. The figure shows a plan of a small apple orchard (dots - apple trees).

The gardener was tasked with tending a row of apple trees. He started his journey from the square marked with a green asterisk (\*), and systematically visited each square one by one. This included squares both occupied by apple trees and unoccupied ones. However, he had one key rule: he would never revisit a square he had already traversed.



Furthermore, he adhered to two additional rules: he only moved horizontally or vertically (not diagonally), and he avoided shaded squares as they were occupied by buildings. At the end the gardener found himself back at the same square from which he had started. Your task is to determine the precise path the gardener took.

6. In your notebook, **use a ruler** to draw a figure that is identical to the given one. It is important that you use a ruler.

