Math 4a. Homework 16.

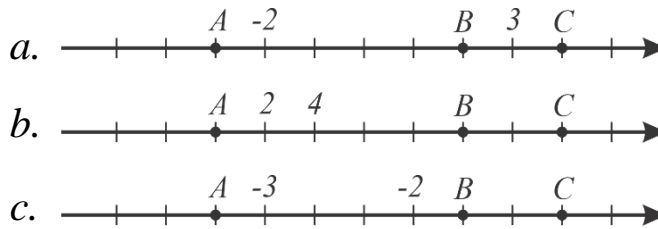**school nova**

1. Find the value of the expressions with given values of variables:

   a. $90 - b : 9$, $if\ b = 0;\ 9;\ 810.$
   b. $a + 52$, $if\ a = 0; 18; 49.$
   c. $s(15 - s)$, $if\ s = 5; 16; 25.$
   d. $240 : d - 4(m + n)$, $if\ d = 1, m = 15, n = 5$

2. Each floor of a residential building has f two-bedroom apartments and g three-bedroom apartments. The building has 5 floors. How many apartments are there in the building? Write the expression firs, then solve the problem for $f = 3$ and $g = 4$
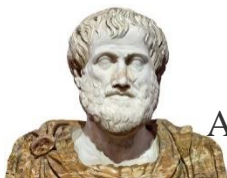
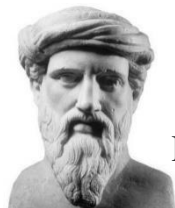3. Write the coordinates of points A, B and C marked on the number lines below:

   a. A -2 B 3 C
   b. A 2 4 B C
   c. A -3 -2 B C

4. Solve the following equations:

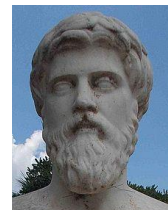   a. $|x| = 23$;   b. $|2x| = 10$;

5. Ancient Greek scientist Aristotle was born in 384 and died in 322. Another Greek scientist, Pythagoras, was born in 570 and died in the year 495. Ancient Greek historian Plutarch was born in 46 and died in 120. Who among them was born earlier? For how long did they live?

Plutarch

Aristotle

Pythagoras

6. There are candies in a box. If each kid takes 4 candies, 19 candies will be left in the box. If each kid takes 5 candies, there will be shortage of 2 candies. How many candies are there in the box? How many kids are at the party?

7. Aunt Sally asked Tom Sawyer to paint $\frac{2}{5}$ of the whole fence. He asked his friend Ben Rogers to help him and Ben painted $\frac{1}{4}$ of that part of the fence. What is the length of the fence if Ben painted $2\frac{1}{2}$ m.

8. What is bigger?

   a. $\frac{1}{2}+\frac{1}{5}$ or $\frac{1}{3}+\frac{1}{4}$;

   b. $\frac{1}{2}-\frac{1}{3}$ or $\frac{1}{4}-\frac{1}{5}$

   c. $\frac{1}{12}+\frac{1}{15}$ or $\frac{1}{13}+\frac{1}{14}$;

   d. $\frac{1}{12}-\frac{1}{13}$ or $\frac{1}{14}-\frac{1}{15}$