

## Homework 18.

1. Solve the following equations:

a.  $2x + 3 = 11$ ;

b.  $\frac{1}{2}x - 5 = 12$ ;

c.  $14 + x = 4 + 6x$

2. The sum of three consecutive odd numbers is 135. What is the smallest of the three numbers?

3. ABCD is a rectangle. Find the coordinates of point D, draw the rectangle in a coordinate system.

a. A(-9; 2), B(-9; 4), C(-3; 4)

b. A(0; 6), B(0; -2), C(5, -2)

c. A(9; 0), B(9, -5), C(2, -5)

d. A(-6; 0), B(-6;-7), C(0; -7)

4. Compute by the most convenient way:

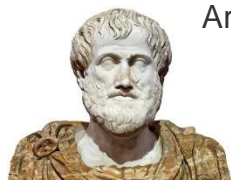
a.  $5.1 + 8.4 - (-5.1) - 10.2 - (+8.4) - 9.8 - (15)$ ;

b.  $-7.81 + 9.64 - 5.32 - (+7.81) + (5.32) - 9.64$ ;

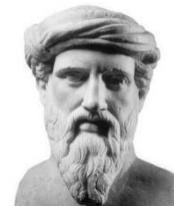
c.  $13.4 + 8.22 - (+1.3) - (-4.78) + (-8) - 10 - 3.4$

d.  $-21 + (-0.68) - (-7.4) + (-3.2) - (+6.8) + 21.68$ ;

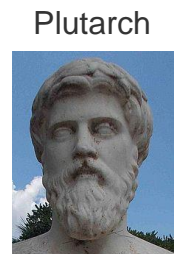
5. Ancient Greek scientist Aristotle was born in 384 and died in 322. Another Greek scientist, Pythagoras, was born in 570 and died in 495. Ancient Greek historian Plutarch was born in 46 and died in 120. Who among them was born earlier, and for how long did they live?



Aristotle



Pythagoras

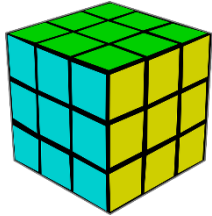


Plutarch

6. A few kids went to the forest to pick mushrooms. If Anya gives half of her mushrooms to Vita, all the children will have equal number of mushrooms, if instead Anya gives all her mushrooms to Sasha, then Sasha will have as many

mushrooms as all the other kids combined. How many kids went to the forest for mushrooms?

7. is cut into 27 identical smaller cubes by making two cuts parallel to each of the three pairs of cube's faces (similar to Rubik's cube).



How many small cubes will have three faces painted?

How many small cubes will have two faces painted?

How many small cubes will have one face painted?

How many small cubes will not have painted faces at all?