

Подстановка среднего арифметического

$$(x + 1)^4 + (x + 3)^4 = 16$$

$$t = x + 2 \Rightarrow x = t - 2$$

$$(t-1)^4 + (t+1)^4 = 16$$

$$(a+b)^4$$

$$11$$

$$121$$

$$1331$$

$$14641$$

$$a^4 + 4a^3b + 6a^2b^2 + 4ab^3 + b^4$$

$$t^4 - 4t^3 + 6t^2 - 4t + 1 + t^4 + 4t^3 + 6t^2 + 4t + 1 = 16$$

$$2t^4 + 12t^2 + 2 = 16$$

$$t^4 + 6t^2 + 1 = 8$$

$$t^4 + 6t^2 - 7 = 0$$

$$t^2 = v$$

$$v^2 + 6v - 7 = 0$$

$$v_1 = 1$$

$$1 * v_2 = -7 \Rightarrow v_2 = -7$$

$$v_2 = -7$$

$$t^2 = 1$$

$$t_1, t_2 = \pm 1$$

$$x = t - 2$$

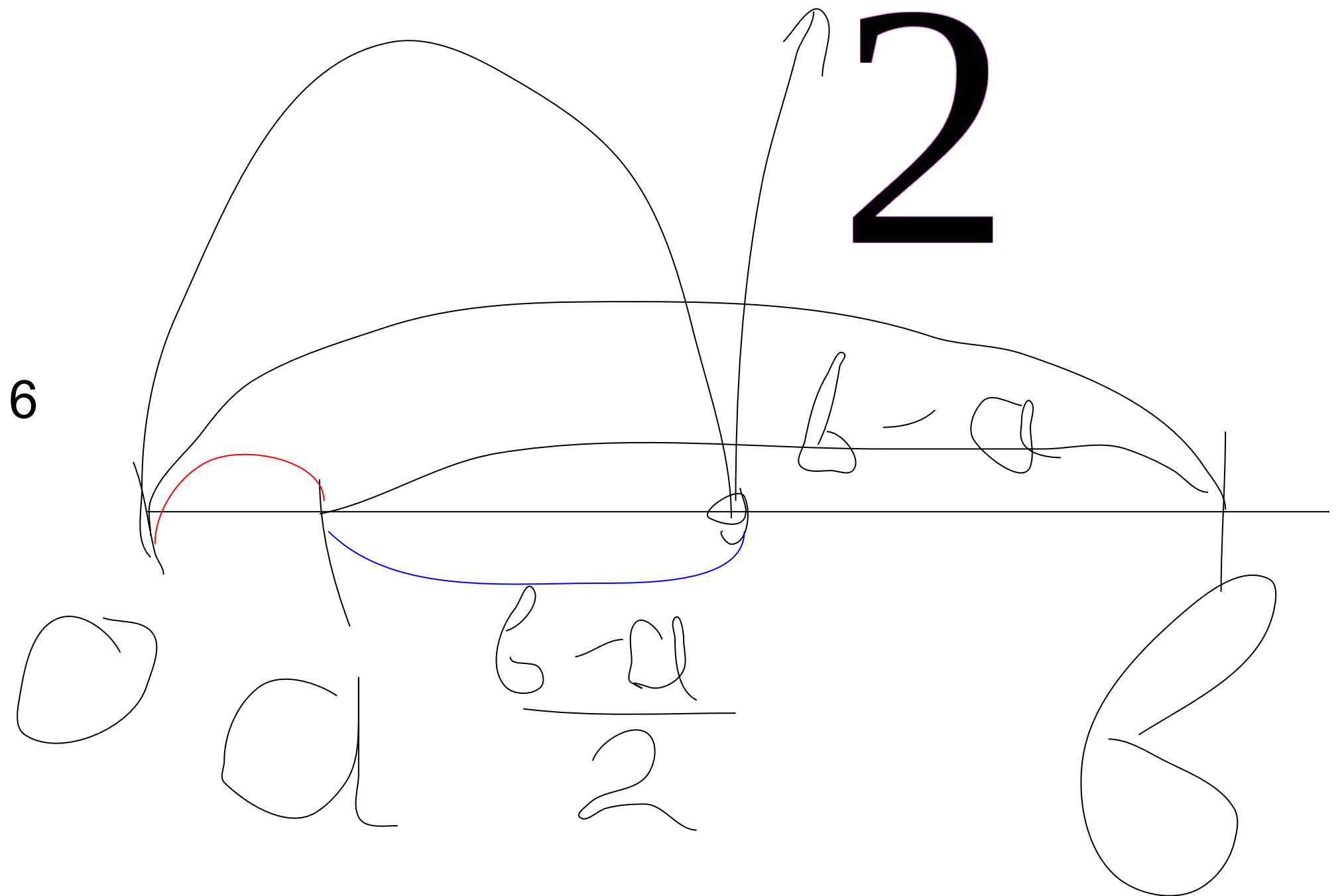
$$x_1 = -1$$

$$x_2 = -3$$

$$t^2 = -7 \text{ no answer}$$

$$\text{answer : } -1, -3$$

$$\underline{a + b}$$



$$a + (b-a)/2 = 2a/2 + (b-a)/2 = (2a+b-a)/2 = (a+b)/2$$