Variant № 0

1.Solve: $\frac{4}{2}:\frac{5}{4}-\frac{1}{5}:\left(-\frac{2}{15}\right)$

a) 3 b) 3,2 c) 3,1 d) 3,3

2. Solve: $(15{,}2-3{,}7)\cdot(2{,}3-1{,}8)$

a) 4,25 b) 5,75 c) 5 d) 5,25

3. Represent the polynomial as the square of the sum or difference two numbers: $a^2+a+0{,}25$

a) $(a+1)^2$ b) $(a-1)^2$ c) $(a+0{,}5)^2$ d) $(a-0{,}5)^2$

4. Solve linear equation: $2x-26=-12$

a) $x=7$ b) $x=5$ c) $x=-4$ d) $x=-6$

5. Solve the inequality: $\frac{1}{x+6}\geq 1$

a) $(-6;-5]$ b) $(6;\infty)$ c) $[-5;\infty)$ d) $[-3;\infty)$

6. Simplify: $8\sqrt{3}-4\sqrt{3}+5\sqrt{75}$

a) $25\sqrt{3}$ b) $29\sqrt{3}$ c) $22\sqrt{3}$ d) $20\sqrt{3}$

7. Solve a system of equations: $\begin{cases}3x+2y=5\\5x-2y=3\end{cases}$

a) $x=1;y=1$ b) $x=1;y=-1$ c) $x=-4;y=2$ d) $x=-2;y=2$

8. Solve the system of inequalities: $\begin{cases}13-2x>0\\3x-9>0\end{cases}$

a) $x\in(3;\infty)$ b) $x\in(3;6{,}5)$ c) $x\in(1;6{,}5)$ d) $x\in(1;6{,}7);$

9. Solve a quadratic equation: $x^2+x-6=0$

a) $x_1=1;x_2=6$ b)$x_1=-3;x_2=2$ c) $x_1=-2;x_2=2$ d) $x_1=-3;x_2=4$

10. The number 150 was reduced by 20%. Find the new value of the number.

a) 130 b) 120 c) 145 d) 125