I. Find the point of intersection of two parabolas $y=x^{2}-5$ and $y=-(x+4)^{2}+5$. Draw their graphs.

II. Solve the quadratic inequalities:

1) $x^{2}-5x+6\geq 0$

2) $x^{2}+2x+2>0$

3) $-x^{2}+4x-3>0$

III. Simplify:

1) $e^{-\frac{x}{2}}\sqrt{\frac{e^{\frac{7}{2}+x}}{e^{-\frac{1}{2}}}}$

2) $e^{3ln2+2ln3}$

IV. Solve the equations:

1) $\frac{2^{x+1}}{3^{x-1}}=6$ 2)$ \frac{2^{x^{2}}}{32^{x}}=\frac{1}{64}$

3) $4ln^{2}x-lnx^{2}=2$ 4) $log\_{2}\sqrt{x}-log\_{2}\frac{1}{x}=3$

V. Find the domain:

1) $g\left(x\right)=ln⁡(2+lnx)$

2) $g\left(x\right)=ln\frac{x+3}{x-1}$

3) $g\left(x\right)=\sqrt{3-e^{2x}}$

4) $g\left(x\right)=\frac{1}{\sqrt{1-log\_{5}(x^{2}-4)}}$