

KORDAMINE ARVESTUSEKS (11. klassi 5. kursus)

1. Lahendage võrrandid ja kontrollige lahendeid

a) $\log_{x+1}(x^2 - 3x - 5) = 2$;

b) $\log(x - 3) + \log(x + 6) = \log 2 + \log 5$;

c) $\log_2(x^2 + 6x) = 4$.

The diagram shows the equation $2^3 = 8$ in a light blue box. Below it, in a light yellow box, is the equation $\log_2(8) = 3$. A blue arrow points from the base '2' in the top equation to the base '2' in the bottom equation. A green arrow points from the exponent '3' in the top equation to the result '3' in the bottom equation. A red arrow points from the result '8' in the top equation to the argument '8' in the bottom equation.

2. Lahendage võrrandid

a) $27^{x-1} = 9^{2-x}$;

b) $5^{2x^2-33x-2} = 1$;

c) $15^x = 42$ (vastus andke kümnendiku täpsusega).