

Exponential inequalities

Homework

№1. Solve the following inequalities:

1. $3^{x+2} - 4 \cdot 3^x < 45;$

2. $0.5^{x-2} - 0.5^x \leq 3.$

№2. Solve the following inequalities:

1. $9^{x+1} - 2 \cdot 3^x - 7 \leq 0;$

2. $0.25^x - 3 \cdot 05^x + 2 \geq 0.$

№3. Solve the inequality $2^{\sqrt{x}-2^{1-\sqrt{2}} \leq 1}.$

№4. Solve the following inequalities:

1. $3 \cdot 16^x + 2 \cdot 81^x - 5 \cdot 36^x < 0;$

2. $2 \cdot 49^{\frac{1}{x}} - 9 \cdot 14^{\frac{1}{x}} + 7 \cdot 4^{\frac{1}{x}} \geq 0.$