

## Quadratic inequalities

### Homework

**№1.** Solve the following inequalities:

1.  $4x^2 > 12x;$

2.  $4x - x^2 > 12;$

3.  $x(x - 2) \leq 2x - 4;$

4.  $x^2 + 2x - 3 \geq 0;$

5.  $x^2 + 6 > -2x;$

6.  $(x - 1)(x - 2) > 0;$

7.  $(x + 3)(x - 5) \leq 0;$

8.  $2x^2 - 5x - 7 > 0;$

9.  $2x^2 - x - 6 < 0;$

10.  $x^2 + 8x + 16 \geq 0;$

11.  $x^2 - 4x - 12 \geq 0;$

12.  $-2(x^2 - 1) + 2(1 - x) - 5 \leq 0.$