

# Homework 3

Nikita

Deadline: Tuesday 10 November, 11:59 pm

Let  $P(x) = 2x^2 + 6x - 20$ .

**Problem 1.**

Solve the equation  $P(x) = 0$  by completing the square.

**Problem 2.**

Solve the equation  $P(x) = 0$  by the quadratic formula.

**Problem 3.**

Show that Vieta's formulas hold for  $P(x)$ .

**Problem 4.**

Show that  $P(x) = a(x - x_1)(x - x_2)$