

Math 366 - Quiz 2

Name and Student ID:

- Question (4+3 pts.): a) Using inspection, or using the information  $\sqrt{14} = [3; \overline{1, 2, 1, 6}]$  find the fundamental solution (the solution with minimum  $x$  and minimum  $y$  in positive integers) of the Pell's equation  $x^2 - 14y^2 = 1$ .
- b) Find two other solutions  $(x, y)$  in positive integers of the same equation  $x^2 - 14y^2 = 1$ .