

# MATH 601 (DUE 10/2)

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1. The Quadratic Equation  $x^2 - 2y^2 = n$  1

### 1. THE QUADRATIC EQUATION $x^2 - 2y^2 = n$

**Exercise.** (Problem 15) Find a solution to  $x^2 - 2y^2 = 7$ .

*Proof.*  $3^2 - 2 \cdot 1^2 = 9 - 2 = 7$ . Thus  $(x, y) = (3, 1)$  is a solution to  $x^2 - 2y^2 = 7$ . □