

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Math 2710 — Worksheet

### §1.1 Introduction to Sets

Show your work. Write your final answer clearly.

1. Write the following set by listing its elements between braces:

$$\{x \in \mathbb{Z} : -2 \leq x < 7\}.$$

2. Find the following cardinality:

$$|\{\{\{1\}\}, 2, \{3, 4\}, \emptyset\}|.$$

3. Sketch the following set of points in the  $x$ - $y$  plane:

$$\{(x, y) \in \mathbb{R}^2 : (y - x^2)(y + x^2) = 0\}.$$