

## MATH 102: HOMEWORK 3

DUE DATE: THURSDAY, SEP. 28

Note that you need to turn in L<sup>A</sup>T<sub>E</sub>X version of this homework.

We briefly mentioned truth sets in class. Here's the definition from the textbook.

**Definition 0.1.** The truth set of a statement  $P(x)$  is the set of all values of  $x$  that make the statement  $P(x)$  true. In other words, it is the set defined by using the statement  $P(x)$  as an elementhood test: Truth set of  $P(x) = x|P(x)$ .

In Velleman:

Section 1.3: 4, 5, 6, 8.

Section 2.1: 3, 4, 6.

(For the problems in Section 2.1 “Universe of discourse” is the same with “Domain of disclosure” mentioned in class)