

An Example of an Error-Prone L^AT_EX Document

A. Student

October 12, 2015

1 A Brief Look at Some Laws of Set Theory

The following laws of set theory are fundamental and can be used to manipulate expressions involving sets:

1. De Morgans Laws: For any two sets A and B ,

$$(A \cup B) = A \cap B$$

$$(A \cap B) = A \cup B$$

2. Distributive Law: For any three sets A, B and C ,

$$A \cap (B \cup C) = (A \cap B) \cup (A \cap C) \tag{1}$$

$$A \cup (B \cap C) = (A \cup B) \cap (A \cup C) \tag{2}$$

$$\dots \left[\sum_{r=0}^{\infty} \frac{1}{r^2} = \frac{p^{i^2}}{6} \right]$$