

Assignment 0

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Here is where I would disclose anything that the graders and/or professor should know about, such as outside resources used or classmates who I worked with.

1. My solution to problem 1

$$\frac{d}{dx} \sin(x^2 + 6x) = \cos(x^2 + 6x) \frac{d}{dx}(x^2 + 6x) \quad (1)$$

$$= \cos(x^2 + 6x)(2x + 6). \quad (2)$$

2. My solution to problem 2.

$$\neg(A \cap B) \equiv \neg A \cup \neg B \quad (3)$$

3. And so on.

| A | B | $A \wedge B$ |
|-----|-----|--------------|
| T | T | T |
| T | F | F |
| F | T | F |
| F | F | F |

4. \mathbb{R} denotes the real numbers. \mathbb{N} denotes the natural numbers. It is of course the case that $\mathbb{N} \subseteq \mathbb{R}$.