

You may collaborate with other students on the homework but you must submit your own individually written solution, identify your collaborators, and acknowledge any external sources that you consult.

**PROBLEM 1** *Passage*

Typeset your favorite passage from a book.

**PROBLEM 2** *Asymptotic notation*

Let  $f$  be a function. Give a formal definition of the set  $\Theta(f)$ .

$$\Theta(f) = \{ \text{functions } g \text{ such that ...} \}$$

Hint: Use the `\exists` command to make the “there exists” symbol  $\exists$ , and the `\forall` command to make the “for all” symbol  $\forall$ .

**PROBLEM 3** *includegraphics command*

Learn how to include drawings in your documents with the `\includegraphics{file}` command by submitting a caricature of me.