

# Homework Sample Template

Michael Laufer testing

October 23, 2017

## LaTeX Practice

### Dependencies

1. linux package aspell-en
2. emacs packages: flyspell, cldatex, auctex, texlive?
3. Make sure that preamble.tex is (setq org-src-fontify-natively t) in the same folder as the org document  
fo(setq org-latex-listings 'minted org-latex-packages-alist '(("minted")) org-latex-pdf-process '("pdflatex -shell-escape -interaction nonstopmode -output-directory %o %f" "pdflatex -shell-escape -interaction nonstopmode -output-directory %o %f"))

### Q1. Let's try some stuff out

- To see latex snippets use ctrl-( c x l). cancel with ctrl-(c c)
- How about some fractions?

$$\frac{1}{2} + 7 = 7.5$$

- Let's try the continuity equation

$$\frac{\partial \rho}{\partial t} + \nabla \cdot \left( \frac{1}{2} \rho u \right)$$

Pure Latex seems to work as well:

$$\frac{1}{2} + 6x + x^2 \tag{1}$$

cldatex mode allows for auto-completion:

1. using `fr <tab>` creates fraction template
2. using `^` raises to a power.  $x^2$
3. `equ <tab>` creates numbered equation template
4. tilda key opens menu of shortcuts, so tilda d creates  $\delta$ . Tilda-tilda d creates  $\partial$ .

### Workflow

- words in org mode
- math in latex with `cdlatex`
- export as pdf with `M-x org-latex-export-to-pdf RET`

### ToDo list: [0/4]

- ☐ Learn how to insert figures with descriptions
- ☐ learn how to use bibliography
- ☐ learn how to insert code snippets
- ☐ Learn how to create figure list,

### Q2. Let's try out some code snippets:

- Code snippet created with `<s <TAB>`
- evaluate code snippet with

```
testlist = []
for i in range(10):
    if i > 5:
        testlist.append(i)
return(testlist)
```