

Math 291  
Lab 4  
Due Monday February 25, 2019

**Instructions:** Use L<sup>A</sup>T<sub>E</sub>X to typeset a document containing each component described below. Turn in your lab in D2L Brightspace. You should submit both your raw TeX (.tex) file and your compiled document (in a form where the web link works, probably pdf). Do *not* submit a .zip file.

You will be graded on both your raw T<sub>E</sub>X code and the accuracy of your compiled document. **Don't forget to include Lab4 in your filename and include a four-line name block similar to the one you did for previous labs.**

- Include the hyperref, multicol, and enumerate packages in your usepackage command.
- Then, start your built document with a link that links to a webpage of your choice (and one that I would be comfortable showing to *my* mother). On the next page I have a link to the course website, but you should use a webpage of your choice and name the link something appropriate to the site that you have chosen. (Note: Depending on your installation of L<sup>A</sup>T<sub>E</sub>X, you may or may not get the blue box indicating it is a live link. Click it to see if it is a link, and make sure that it works. You usually have to build to a pdf for this to work.)
- Then typeset each of the following. Pay attention to the **exact symbols** used in each example. Some will require you to redefine the enumeration or itemize symbol used, and some will require multicolumns. In addition:
  - Use the newpage command to get each new page.
  - Page (1) (the random Fagerstrom large list) must use the commands from the enumerate package.
  - The first two lists on page (2) must use the normal enumerate environment and the renewcommand to rename the labelenumi, labelenumii, etc., or labelitemi, labelitemii, etc.
  - The third list on page (2) must use an itemize environment and the renewcommand to rename the labelitemi.
  - Put a 0.5-inch space between the first two lists on page 2.
  - Put a 2.5-cm space between the second and third lists on page 2.
  - On page (3) there are three segments. The first is an enumerated list. The content of the list tells you the horizontally spacing commands to use. For the spaces between the three segments as well as the space at the end of the sheet of paper, use the stretch command with a ratio of 3 : 6 : 4. In other words, if the unit of measure is chosen so that the vertical space between the first two segments is 3 units, then the vertical space between the second and third segments is 6 units, and the vertical below the third segment is 4 units.

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(1) Some random lists from Dr. Fagerstrom.

a: Colors

- ((i)) Pink
- ((ii)) Fuchsia
- ((iii)) Lilac

b: Pets

- (A:) Cats
- (B:) Frogs
- (C:) Dogs
- (D:) Younger siblings

c: Fields of Mathematics

- i) Differential Equations
- ii) Partial Differential Equations
- iii) Difference Equations
- iv) Real Analysis
- v) Complex Analysis
- vi) Functional Analysis

d: LASC or WI courses

{A} LASC

- LASC course #1) Science of Cooking
- LASC course #2) Art of Listening
- LASC course #3) Nature of Sustainability
- LASC course #4) Environmental Psychology

{B} WI

- WI course #i) Sport and Play in the United States
- WI course #ii) Philosophy of the Arts
- WI course #iii) Ethics in the Information Age

(i) First!

(ii) Second!

A: this

B: that

(iii) Third!

(iv) Fourth!

### A Childhood poem

[Line 1] One, two, buckle my shoe.

[Line 2] Three, four, shut the door.

[Line 3] Five, six, pick up sticks.

[Line 4] Seven, eight, lay them straight.

[Line 5] Nine, ten, a big fat hen.

[Line 6] Eleven, twelve, dig and delve.

[Line 7] Thirteen, fourteen, maids a-courtin'.

[Line 8] Fifteen, sixteen, maids a-waitin'.

[Line 9] Seventeen, eighteen, maids in the kitchen.

[Line 10] Nineteen, twenty, my plate's empty!

(£) frog

(£) dragon

(£) tadpole

(£) pterodactyl

(£) lizard

(£) toad

(£) crocodile

(£) eft

(£) chameleon

(£) salamander

(£) iguana

(£) gecko

(£) newt

(£) snake

1. This item has a space of 15 points (the unit in  $\text{\LaTeX}$  is pt) to the left of it.

This item has been moved 0.5 inches to the left and is writing on top of the counter.

3. This has a 5 em space to the left. And then a gap of width 10 mm.

This is second segment.

This is a third segment.