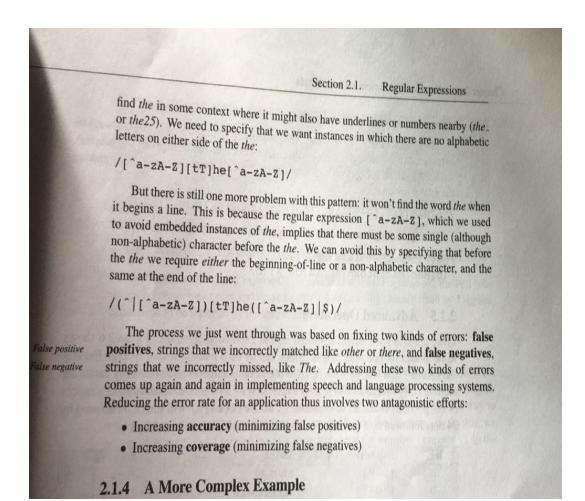
Q1

$$y = cx^{-k} k = \frac{1}{2}, 1, 2$$

Explaining significance.

Q2. Hints from book, for the word "The" or "the"



Q3 . ([Gg]roundhogs?|[Ww]oodchucks?)\$

Ans 5. Tokens 14

Type 13 (without lemmatization, otherwise 12)

Ans 6.

Possible answers:

(a) Tokenization

- (b) Normalisation
- (c) Stemming
- (d) Lemmatization
- (e) Stop word removal

Any example for each.

Ans 7. TP = 3

FN = 5

Precision = $3/6 = \frac{1}{2}$

Recall = 3/8