# DM517 – Fall 2014 – Weekly Note 8

**Stuff covered in week 44**

The last part of Section 3.2 as well as Section 3.3 and the first part of Section4.1.

**Key points**

- A Turing machine is said to **enumerate** a language $L$ if it, when started on an empty tape, prints all strings in $L$ to an attached printer (and no strings that are not in $L$). A language $L$ is Turing-enumerable if there exists a TM which enumerates $L$. We proved that a language is Turing-acceptable if and only if is Turing-enumerable.

- Many problems concerning regular and context-free languages are decidable.

- A problem/language is said to be **undecidable** if no TM decides it.

**Lecture November 3, 2014:**

- The rest of Section 4.1.

- Section 4.2

- Section 5.1 pages 215-220.

**Exercises November 5, 2014:**

- 4.2, 4.3, 4.4, 4.8, 4.20, 4.25, 4.29, 4.31

- October 2010 problem 3.

- If there is time left, you should talk about the first obligatory set of problems.