

Some things covered in today's class discussion:

1. Bonus problem discussion.
2. General questions from the class.
3. Review decidability of various languages for the three classes of machines we have considered. Fill in the rows of the following table with D for "T-decidable" by a TM, R for "T-recognizable but not T-decidable", or U for "not T-recognizable".

	Acceptance	Emptiness	Equality
DFA			
PDA			
TM			

Recall, for a machine type W ,

Acceptance: $A_W = \{\langle M, w \rangle : M \text{ is a machine of type } W \text{ and } M \text{ accepts } w\}$

Emptiness: $E_W = \{\langle M \rangle : M \text{ is a machine of type } W \text{ and } L(M) = \emptyset\}$

Equality: $EQ_W = \{\langle M, N \rangle : M, N \text{ are machines of type } W \text{ and } L(M) = L(N)\}$.

4. Review the theorem: A language is decidable if and only if it is recognizable and co-recognizable.
5. What about the co-recognizability of the languages considered above?