

## Discussion 7

### Problems

1. (a) Show that the collection of decidable languages is closed under the **intersection** operation.  
(b) Show that the collection of Turing-recognizable languages is closed under the **intersection** operation.

2. Let  $A = \{\langle M \rangle \mid M \text{ is a DFA that doesn't accept any string containing an odd number of 1s}\}$ . Show that  $A$  is decidable.