

Today Reducibility and undecidable languages, continued. Ch. 5.

Next class Catch-up and mini-review.

1. List the members of your group below. Underline your name.

2. Prove or disprove each, for languages A and B :

(a) If $A \leq_m B$ and B is decidable then A is decidable.

(b) If $A \leq_m B$ and A is decidable then B is decidable.

3. Prove or disprove each, for languages A and B :

(a) If $A \leq_m B$ and A is regular then B is regular.

(b) If $A \leq_m B$ and B is regular then A is regular.

4. Provide precise definitions of the following languages.

- (a) Equivalent CFGs.
- (b) Non-equivalent CFGs.

5. Prove or disprove the (1) decidability and (2) recognizability of each language in Question 4.