Problem Set 12
Recursion Theory

Institute for Logic, Language and Computation
Universiteit van Amsterdam

Due December 18, 2005

[CT] is *Computability Theory* by Barry Cooper.

1. Given that $\mathbf{a}' = \mathbf{b}'$, which of the four possibilities $\mathbf{a} < \mathbf{b}$, $\mathbf{a} = \mathbf{b}$, $\mathbf{a} > \mathbf{b}$, $\mathbf{a}|\mathbf{b}$ can hold? Explain your answers (you can say "not enough information" if it does not follow from what we have discussed so far, i.e., up through 10.6 in [CT]).

2. Given that $\mathbf{a}' < \mathbf{b}'$, which of the same four possibilities can hold? Explain your answers (you can say "not enough information" if it does not follow from what we have discussed so far, i.e., up through 10.6 in [CT]).

3. 10.5.18

4. 10.5.19

5. 10.6.6