

Exercise 5.2.3: Suppose that we have a production $A \rightarrow BCD$. Each of the four nonterminals A , B , C , and D have two attributes: s is a synthesized attribute, and i is an inherited attribute. For each of the sets of rules below, tell whether (i) the rules are consistent with an S-attributed definition (ii) the rules are consistent with an L-attributed definition, and (iii) whether the rules are consistent with any evaluation order at all?

- a) $A.s = B.i + C.s$.
- b) $A.s = B.i + C.s$ and $D.i = A.i + B.s$.
- c) $A.s = B.s + D.s$.

a) $A.s = B.i + C.s$

- i) No
- ii) Sí
- iii) Sí

b) $A.s = B.i + C.s$ and $D.i = A.i + B.s$

- i) No
- ii) Sí
- iii) No

c) $A.s = B.s + D.s$

- i) Sí
- ii) No
- iii) Sí