

# Dependency Parsing: Week 13 Quiz – Solutions

1. Indicate whether the following statements are true or false.

	TRUE	FALSE
The Eisner algorithm finds non-projective trees.		✓
In the Eisner algorithm, the <code>COMBINE LEFT</code> rule creates an L-item and a dependency edge, both with the same span.		✓
The output of the Chu-Liu-Edmonds algorithm is a graph without cycles.	✓	
In a biaffine dependency parser, edge weights are computed by a neural network.	✓	
Transition-based parsers require feature engineering, whereas graph-based parsers don't.		✓
In Universal Dependencies v2, prepositions are treated as the root of their prepositional phrases.		✓
In Universal Dependencies v2, prepositions are marked with the dependency label <code>CASE</code> .	✓	
In the arc-standard transition system, once a word has an incoming edge, it can no longer receive any outgoing edges.	✓	
In the arc-eager transition system, after a word is <code>SHIFTed</code> onto the stack, the next transition gives it an incoming edge.		✓
In a dynamic oracle, an “optimal” transition is defined as a transition that is part of a correct transition sequence.		✓

2. Pick one of the following two sentences and draw a dependency tree for it that conforms to the Universal Dependencies v2 guidelines.
- (a) Armin Laschet verweigert auch im „Brigitte“-Gespräch eine Ansage an Hans-Georg Maaßen und gibt sich ganz entspannt.
  - (b) Two others suspected of being involved in the fatal attack on President Jovenel Moïse were arrested, he said.

