

Problems 4–6

Problem 4. Draw the smallest graph (vertices plus edges) having one source and one sink such that the graph is not series-parallel. Prove it.

Problem 5. Explain the notion of pseudotransitivity in the Nondeterminator.

Problem 6. Suppose the code for reading a shared location l in the Nondeterminator is changed to the following:

read a shared location l by procedure F :

```
if FIND-SET( $writer(l)$ ) is a P-bag
  then a determinacy race exists
   $reader(l) \leftarrow F$ 
```

Are the errors made by this incorrect code false positives or false negatives? Give a simple example of what can go wrong.