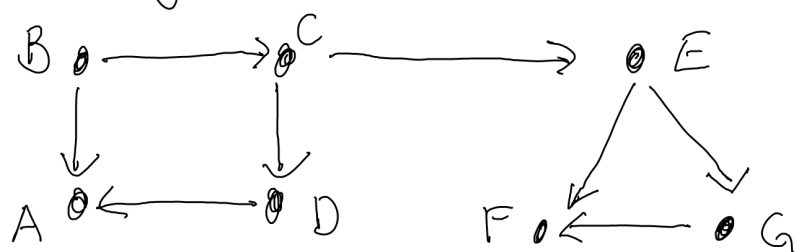
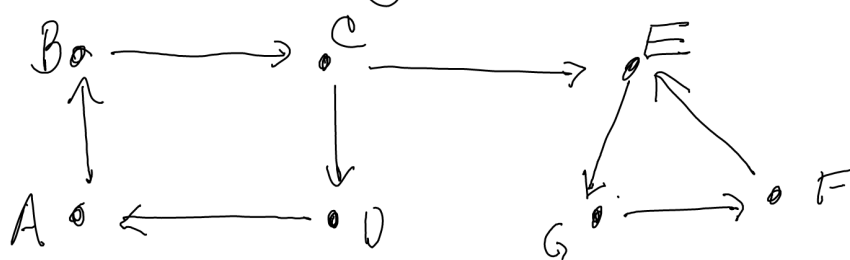


There was an error in the posted solution to problem 5(b) on the review sheet. Rather than just report a corrected version, I thought it would be better to explain the error in detail. The second digraph in the figure is



but in my haste I thought I was looking at



It is still the case that this is a preorder, not a partial order, but the answers to whether the relation satisfies the logic formulas in part (b) are different.

For sentence (i), this says that there is a vertex to which there is a path from every vertex in the graph. This is true in the second diagram (E, F, G) above, but not in the actual diagram. The second sentence (ii) says there is a vertex from which there is no path to any other vertex. This is false in the second diagram above but true in the actual diagram in the problem (vertices A, D). Sentence (iii) says that there is a pair of vertices such that there is no path from one to the other. This is false in the second diagram, but there are many such pairs in the actual graph — neither A nor D is comparable to any of E, F, G.