5.16

**Consider the DFG below. The numbers in parentheses are the computation times of the nodes.**

1. What is the iteration bound of this DFG? What is the actual iteration period?
2. Retime this DFG to minimize the iteration period. What is the actual iteration period of the retimed DFG?
3. Unfold both the original DFG and the retimed DFG by a factor of 2. what are their actual iteration periods?
4. Determine the minimum unfolding factor J such that the J-unfolded DFG (unfold from the original DFG) can be retimed so that the critical path of this unfolded and retimed DFG is , where is the iteration bound of the original DFG below. Unfold the DFG by this minimum unfolding factor and retime the unfolded DFG so that its critical path is .

