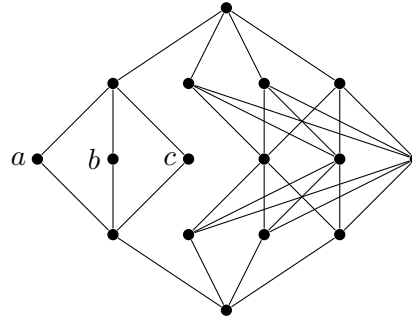


Name:

Student ID:

You have 15 minutes to complete the quiz. The maximum score is 10 points.

Does this graph have a perfect matching? Justify your answer.



Solution: No. The set $S = \{a, b, c\}$ has size three but two neighbors. The vertices in S cannot be matched.