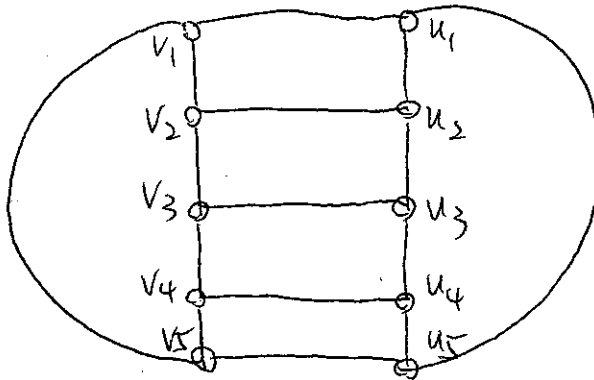# Mathematics 2602
Quiz 6
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1. Consider the graph $G = G(V, E)$ where

$$V = \{u_i, v_i \mid 1 \le i \le 5\}$$

and

$$E = \{u_i v_i \mid 1 \le i \le 5\} \cup \{u_i u_{i+1} \mid 1 \le i \le 4\} \cup \{v_i v_{i+1} \mid 1 \le i \le 4\} \cup \{u_5 u_1, v_5 v_1\}.$$

1. Draw a picture of the graph G.

2. What is the degree of the vertex v_3?

3

3. If G a bipartite graph? Why or why not?

No. Because G contains an odd cycle, which is not bipartite, as a subgraph.