

Name Prof. M

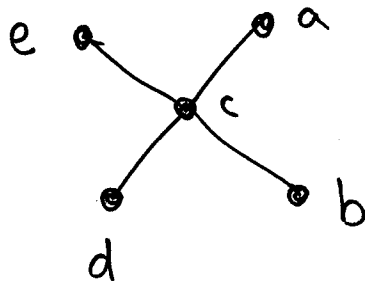
Mathematics 2602

Quiz 9

Prof. Margalit

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1. Draw a picture of the graph  $G(V, E)$  where  $V = \{a, b, c, d, e\}$  and  $E = \{\{a, c\}, \{b, c\}, \{c, d\}, \{c, e\}\}$ .



2. Is  $G(V, E)$  a complete bipartite graph  $K_{m,n}$ ? If so, which  $m$  and  $n$ ? If not, why not?

$K_{1,4}$

3. Is there an isomorphism of  $G(V, E)$  with itself that is not the identity? If so, give an isomorphism. If not, say why not.

$$f(a) = b$$

$$f(b) = a$$

$$f(c) = c$$

$$f(d) = d$$

$$f(e) = e$$