

## Quiz 8 - MACM 201 - *Solutions*

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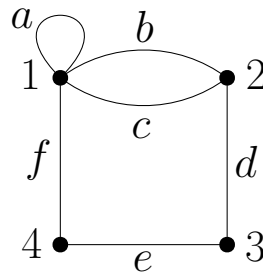
[4 pts] Draw the multigraph  $G = (V, E)$  where

$$V = \{1, 2, 3, 4\} \quad E = \{a, b, c, d, e, f\}$$

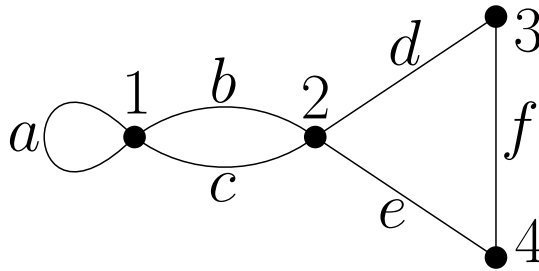
$$a \sim 1, \quad b \sim 1, b \sim 2, \quad c \sim 1, c \sim 2,$$

$$d \sim 2, d \sim 3, \quad e \sim 3, e \sim 4, \quad f \sim 4, f \sim 1.$$

*Solution.*



[4 pts] Describe the multigraph drawn below by stating the vertex set, edge set, and all incidences.



*Solution:* The drawing depicts a multigraph with vertex set  $\{1, 2, 3, 4\}$ , edge set  $\{a, b, c, d, e, f\}$  and incidences  $a \sim 1, b \sim 1, b \sim 2, c \sim 1, c \sim 2, d \sim 2, d \sim 3, e \sim 2, e \sim 4, f \sim 3, f \sim 4$ .