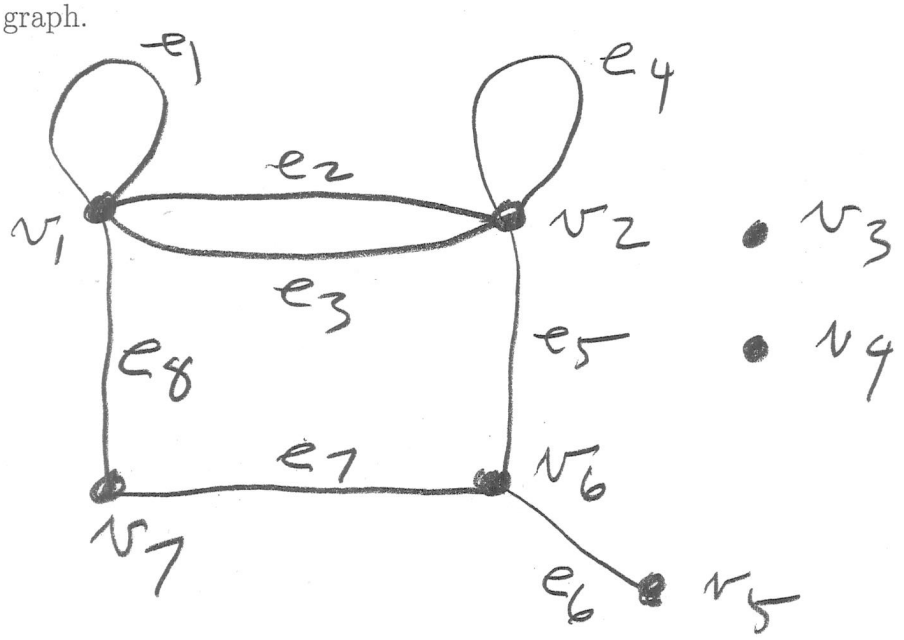
Mathematics 174

Quiz # 29 Name: Key

You must show your work to get full credit.

For the following graph.



Find

All the edges adjacent to v_2 e_2, e_3, e_4, e_5

All vertices adjacent to e_5 v_2, v_6

The degree of v_1 5

All loops. e_1, e_2

All parallel edges. e_1 and e_3

All isolated points. v_3, v_4

The total degree. 16

$\deg v_1 = 5$
$\deg v_2 = 5$
$\deg v_3 = 0$
$\deg v_4 = 0$
$\deg v_5 = 1$
$\deg v_6 = 3$
$\deg v_7 = 2$

total deg $= 16$

or total degree $= 2$(# of edges) $= 2 \cdot 8 = 16$