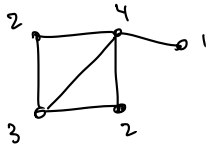


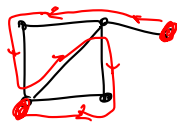
Math 1015
 Homework #9
 #3, 4, 5, 6

3



a) No Euler circuit - not all degrees are even

b) There is a Euler path:

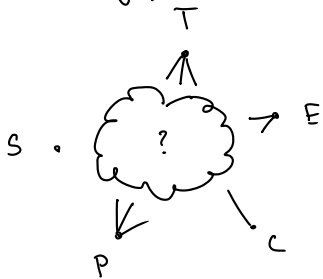


ECDACBA

c) The sum of degrees is $1+4+2+2+3 = 12$, which is even.

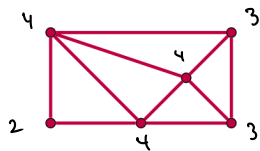
4

Make a graph of them, it would look like:

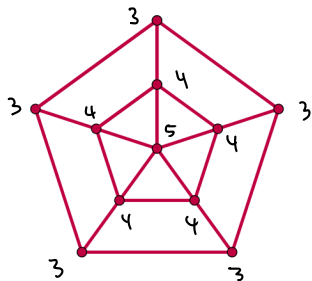


then the sum of degrees is $0+3+2+1+3 = 9$, which is odd so this is impossible.

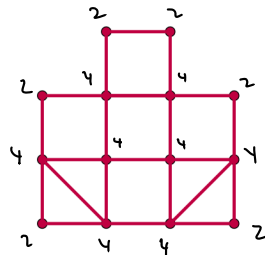
5



← 2 odds, so it has an E. path

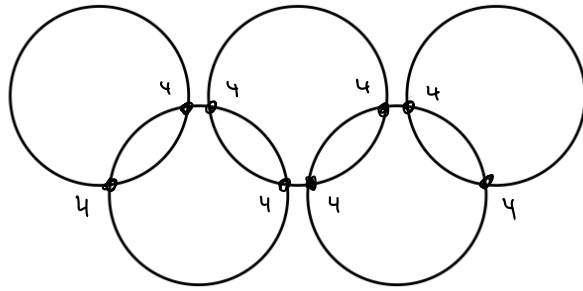


More than 2 odds, so no E. circ or path.



All even, so it has an E. circuit.

16



All even, so
we can do an
Euler circuit.

