Leonel Garay
CS-225: Discrete Structures in CS
Homework 9, Part 2

Exercise Set 10.1: Problem 2

1: Just a walk → One repeated edge, start and end point not the same
2: It's a simple circuit → no repeated edges, points are the same
3: It's a closed walk → One repeated edge, same end and start point
4: It's a simple circuit → Only first vertex is repeated
5: It's a trial → no repeated edges, repeated vertex
6: It's a path → no repeated edges, no repeated vertex

Exercise Set 10.1: Problem 9

B

All vertices G have even degree. G has Euler circuit.

Exercise Set 10.1: Problem 15

•Graph G has Euler circuit when G is connected and all vertex have an even degree
Thus the graph has an Euler circuit
rzyxwyvzsxtuvutsr

Exercise Set 10.1: Problem 20

No Euler from u to w. u & w have odds, but the vertex e doesn't have evens.

Vertex	Degree
a	2
b	2
c	2
d	2
e	3
f	4
g	2
h	3
i	3

Exercise Set 10.1: Problem 21

Connected, degrees of u & w are odd, other vertices are even: It has an Euler path u—w