

NAME _____

Homework for Grade 5 (Part 2)

Instructions for Problems 1 – 8

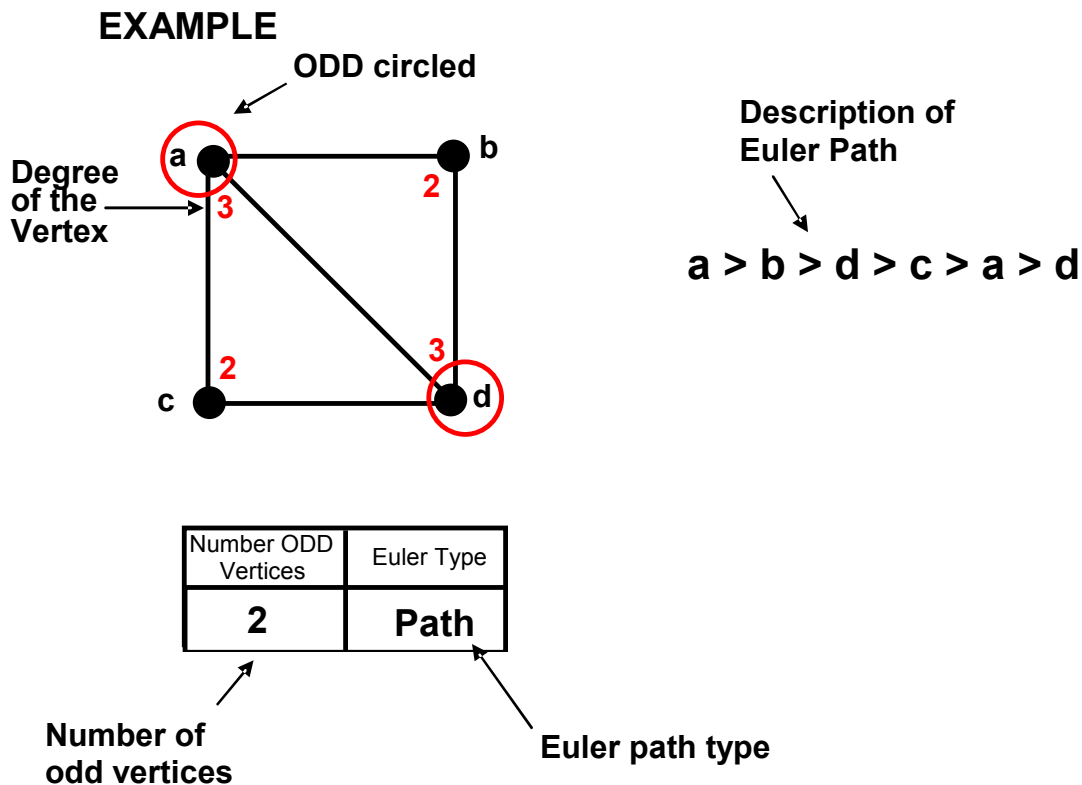
1. Write the Degree of each vertex on the figure.
2. Circle the Odd vertices. Count the number of odd vertices and place the number in the box at the lower left of each figure.

Determine if there is:

- an Euler Circuit (therefore also an Euler Path)
- an Euler Path only
- NO Euler Circuit or Path

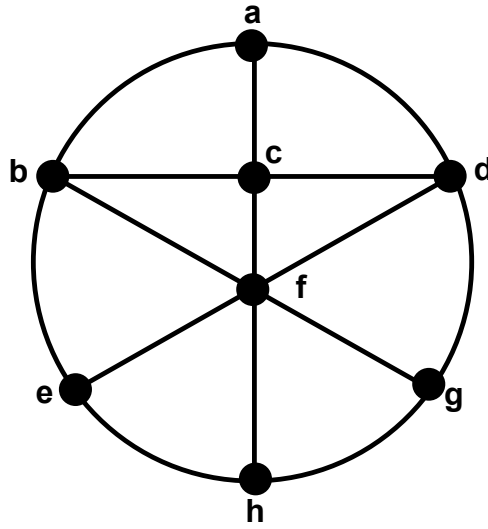
Write the answer in the box under the heading “Euler”.

3. If there is an Euler Circuit or Path describe it by using the letters at each vertex, separated by a “greater than” sign (>)



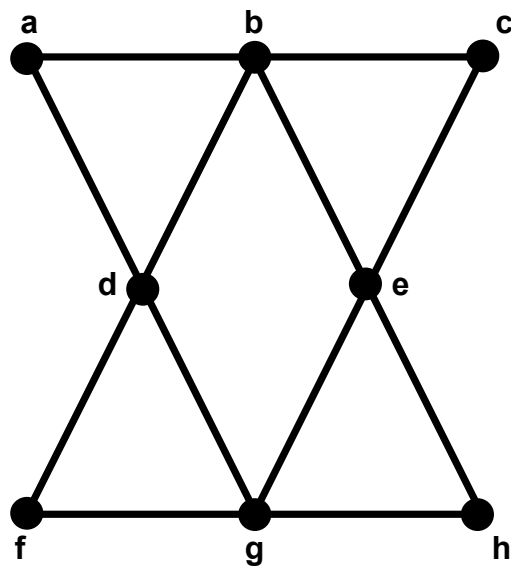
NAME _____

• Problem 1



Number ODD Vertices	Euler Type

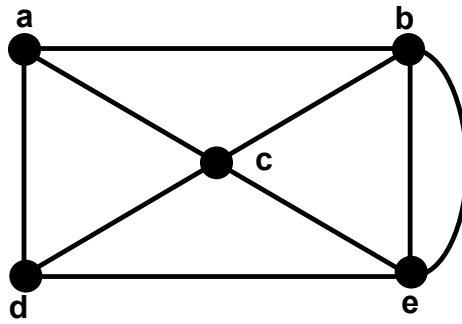
• Problem 2



Number ODD Vertices	Euler Type

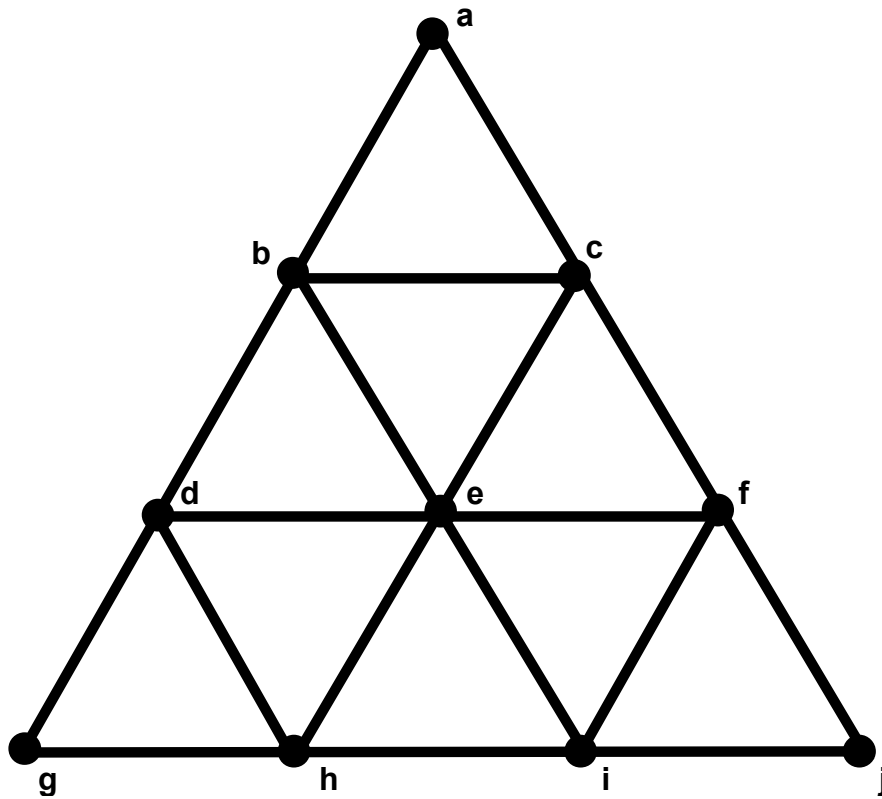
NAME _____

• Problem 3



Number ODD Vertices	Euler Type

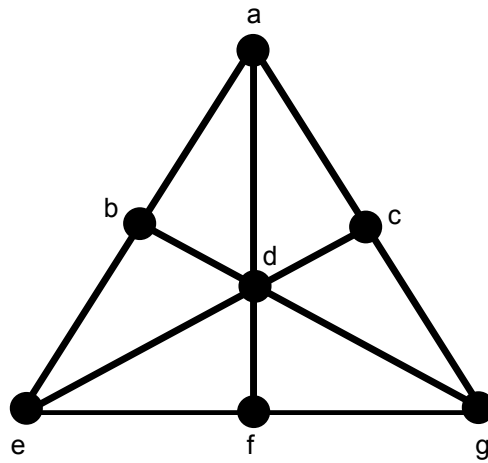
• Problem 4



Number ODD Vertices	Euler Type

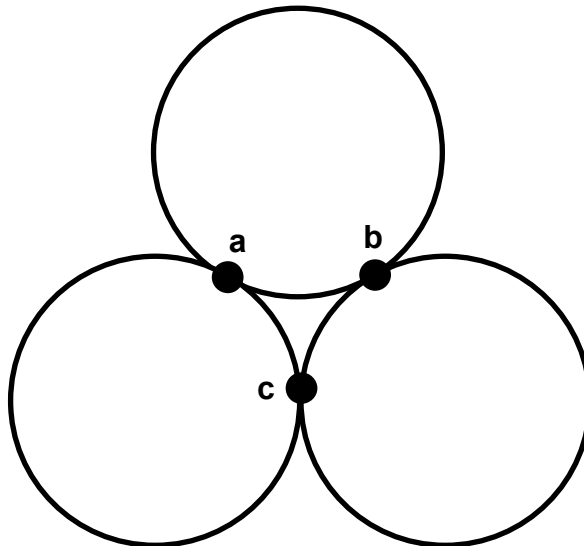
NAME _____

• **Problem 5**



Number ODD Vertices	Euler Type

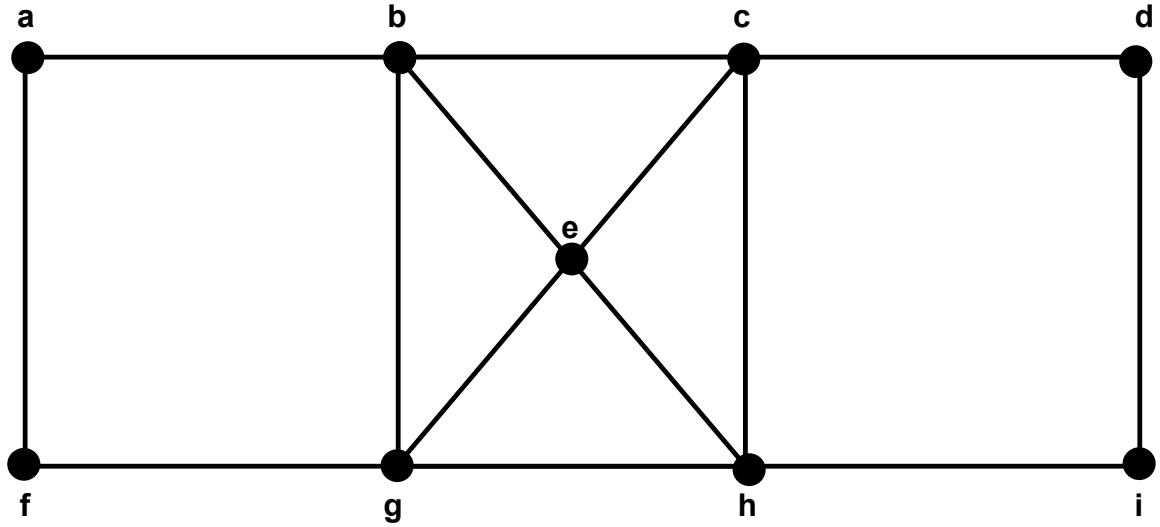
• **Problem 6**



Number ODD Vertices	Euler Type

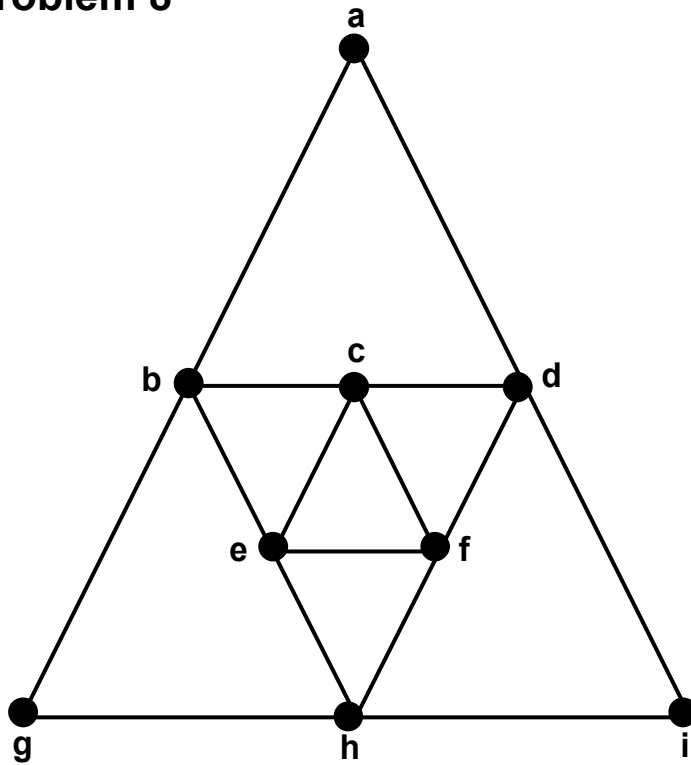
NAME _____

• **Problem 7**



Number ODD Vertices	Euler Type

• **Problem 8**



Number ODD Vertices	Euler Type

Homework for Grade 5 (Part 2)

Instructions for Problems 1 – 8

1. Write the Degree of each vertex on the figure.
2. Circle the Odd vertices. Count the number of odd vertices and place the number in the box at the lower left of each figure.

Determine if there is:

- an Euler Circuit (therefore also an Euler Path)
- an Euler Path only
- NO Euler Circuit or Path

Write the answer in the box under the heading “Euler”.

3. If there is an Euler Circuit or Path describe it by using the letters at each vertex, separated by a “greater than” sign (>)

EXAMPLE

Description of Euler Path

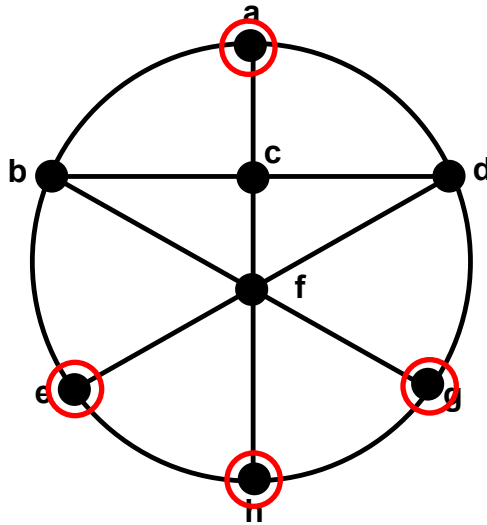
$a > b > d > c > a > d$

Number ODD Vertices	Euler Type
2	Path

Number of odd vertices

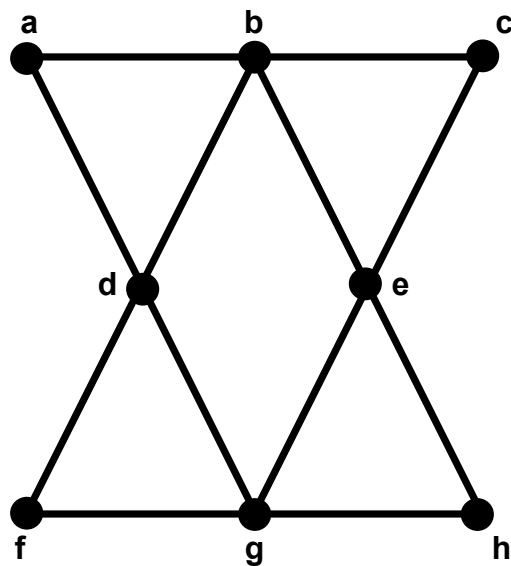
Euler path type

• Problem 1



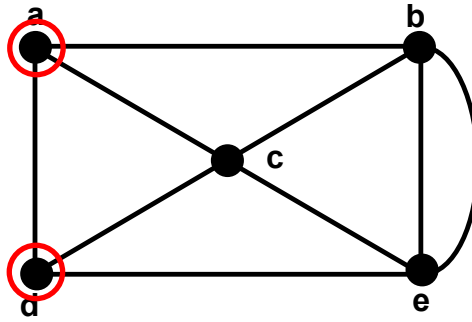
Number ODD Vertices	Euler Type
4	None

• Problem 2



Number ODD Vertices	Euler Type
0	Circuit

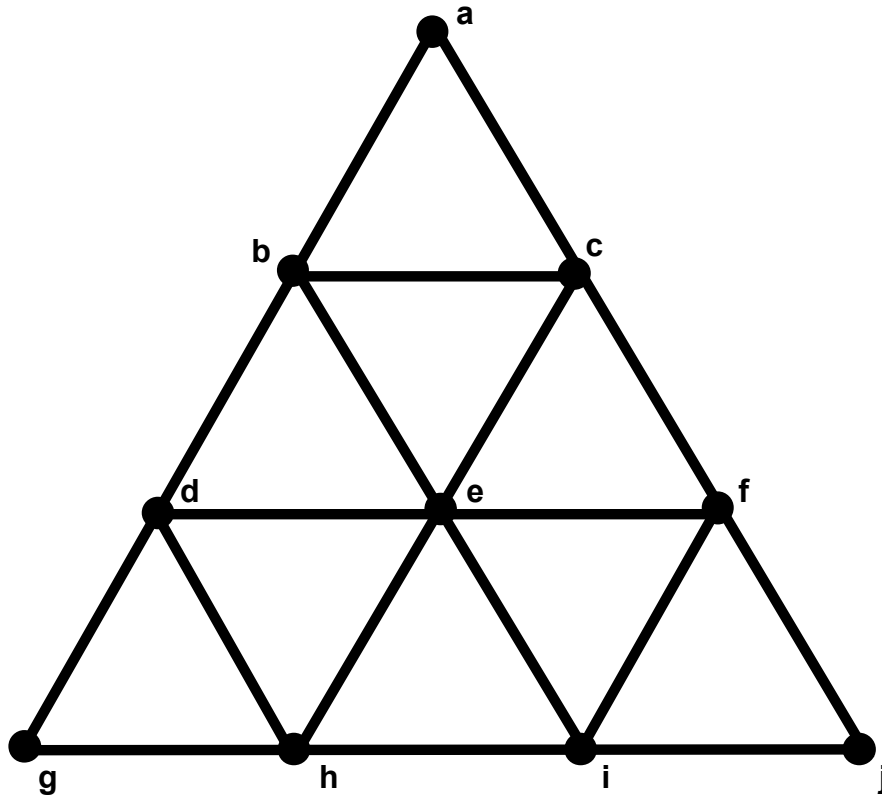
• Problem 3



Number ODD Vertices	Euler Type
2	Path

3 Example Path: a > c > b > e > d

• Problem 4

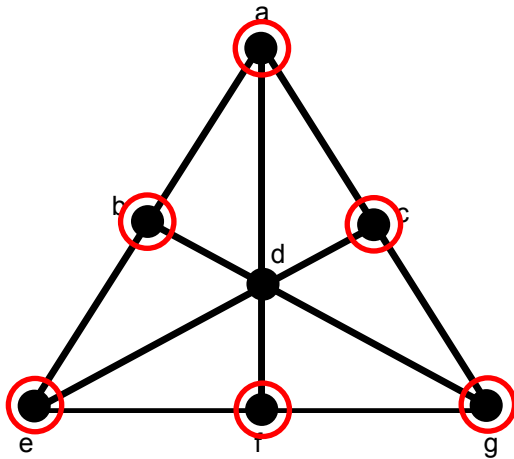


Number ODD Vertices	EulerType
0	Circuit

3 Example Circuit: a > c > f > j > i > e > h > g > d > b > a

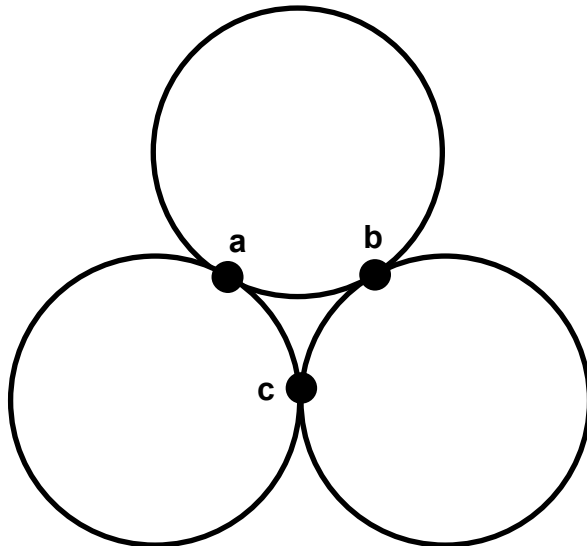
NAME _____

• Problem 5



Number ODD Vertices	Euler Type
6	None

• Problem 6

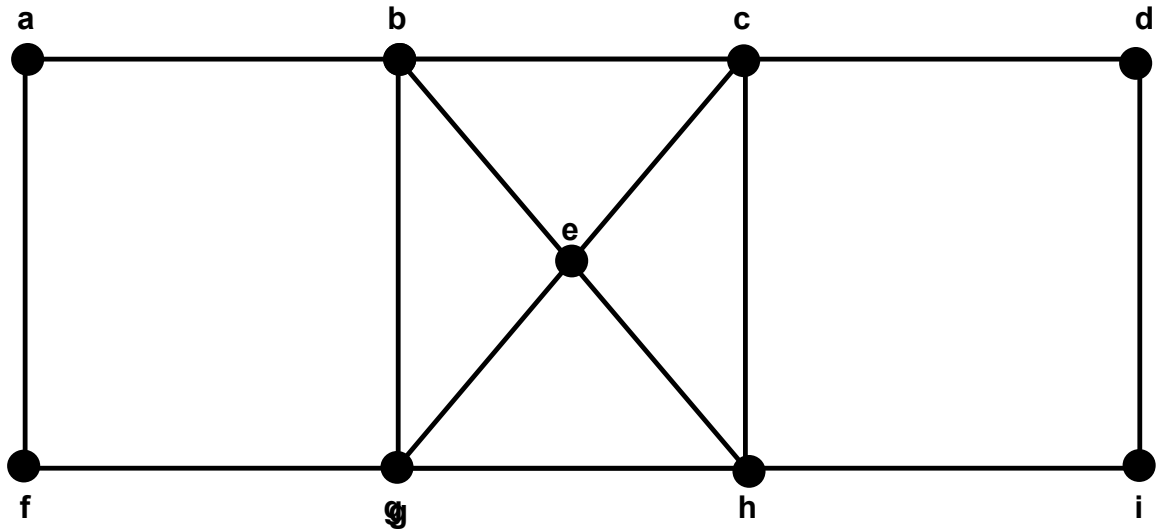


Number ODD Vertices	Euler Type
0	Circuit

Example Circuit: $a > b > c > a > c > b > a$

NAME _____

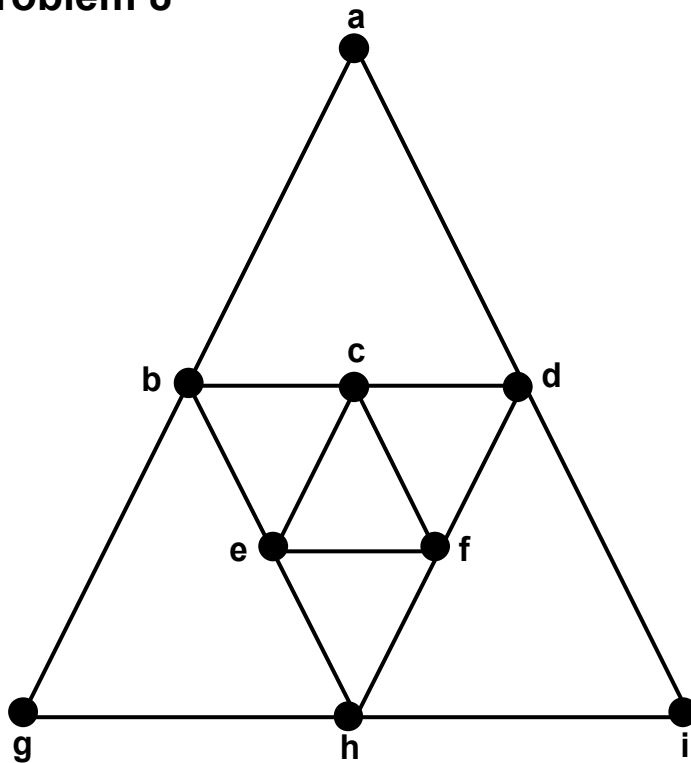
• Problem 7



Number ODD Vertices	Euler Type
0	Circuit

Example Circuit: a > b > g > e > h > c > e > b > c > d > i > h > g > f > a

• Problem 8



Number ODD Vertices	Euler Type
0	Circuit

Example Circuit: a > d > c > b > e > c > f > e > h > f > d > i > h > g > b > a