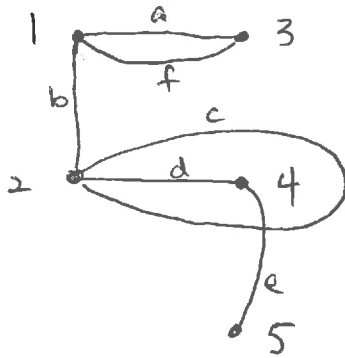


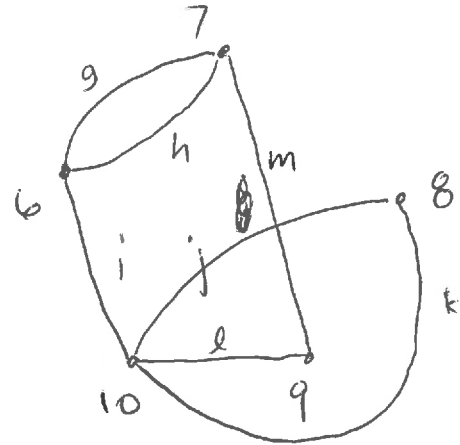
Quiz 10.

Consider:

Graph #1



Graph #2



Concerning Graph 1:

- (a) Does it have any loops? Parallel ~~vertices~~ edges?
- (b) What is the degree of each vertex?
- (c) Is it planar?
- (d) Is it isomorphic to Graph #2?

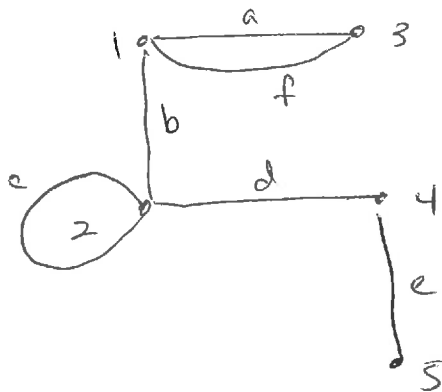
Solutions:

(a) Yes. c is a loop, and a and f are parallel edges.

(b)

Vertex	Degree
1	3
2	4
3	2
4	2
5	1

(c) Yes, because it can be redrawn like so:



No edges cross each other.

(d) No. Some differences:

(*) Graph 1 has a vertex of degree 1, and Graph 2 does not.

(*) Graph 1 has one pair of parallel edges and Graph 2 has two.

(*) Graph 1 has a loop and Graph 2 doesn't.

(*) Graph 1 has six edges and Graph 2 has seven.