1. Are all cycle graphs planar? **1 / 1 point**

- ○ No
- ◉ Yes

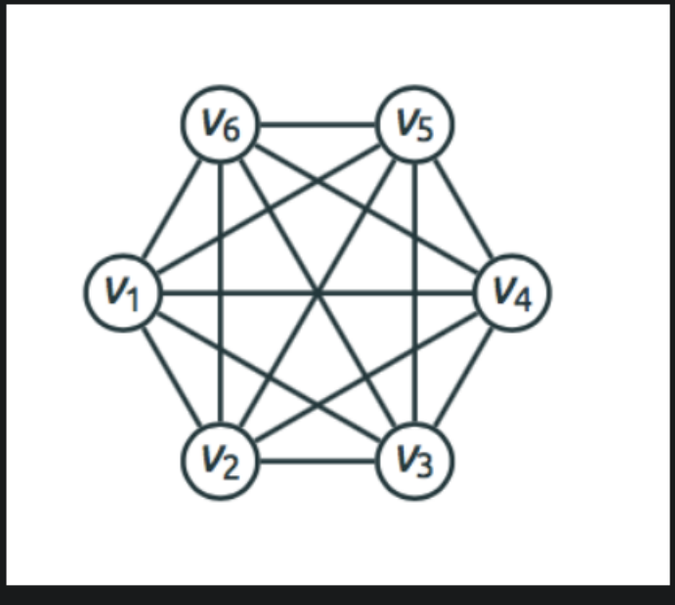
Correct
Correct, any cycle graph can be drawn in the plane without crossing edges.

2. How many vertices does a connected planar graph G have if it has 7 edges and can be drawn without any edge crossings with 4 faces? **1 / 1 point**

- ◉ 5
- ○ 7
- ○ n
- ○ 4

Correct
Correct, by Euler's formula v = 2+e-f = 2+7-4 = 5.

3. **1 / 1 point**



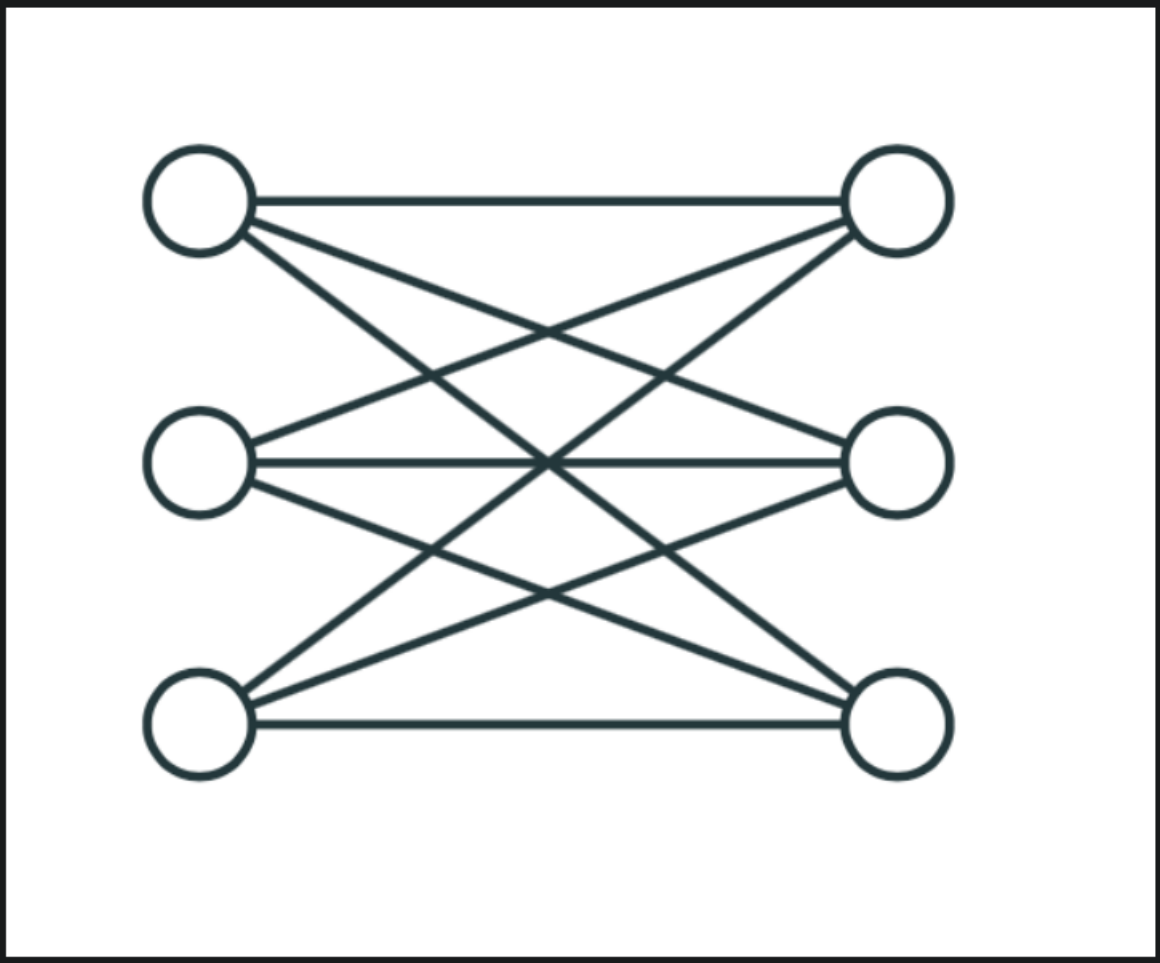
Is the full graph K_6 on 6 vertices planar?

- ○ Yes
- ◉ No

Correct
Correct, even the full graph K_5 on 5 vertices cannot be drawn in the plane without crossing edges.

4.

1 / 1 point



We already know that the full bipartite graph $K_{3,3}$ is not planar. How many edges does one need to remove from it to make it planar?

- 0
- 1
- 3
- 2

Correct

Correct, after removal of any edge this graph can be drawn without crossing edges.