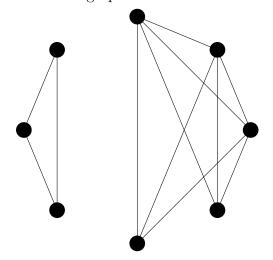
Triangle Decomposition Worksheet

1. Consider this graph.



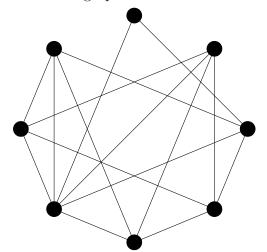
(a) How many edges does it have?

(b) Does it have any odd degree vertices?

YES NO

(c) Is there a triangle decomposition?YES NO Why or why not?

2. Consider this graph.



(a) How many edges does it have?

(b) Does it have any odd degree vertices?

YES NO

(c) Is there a triangle decomposition?

YES NO Why or why not?

3. Draw a graph that has a multple of 3 many edges, only even degrees, but has no triangle decomposition. Briefly explain why.