Weekly Problems 6

Due: 12 March 2025 at midnight EST as a PDF on Submitty

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1. Graph G is 2-connected. Prove that $\forall e \in E(G) : e$ lies on some cycle $C \subseteq G$.

2. A graph is *minimally 2-connected* if $\forall e \in E(G) : G - e$ is not 2-connected. Now, prove that every cycle subgraph in G is an *induced* subgraph.