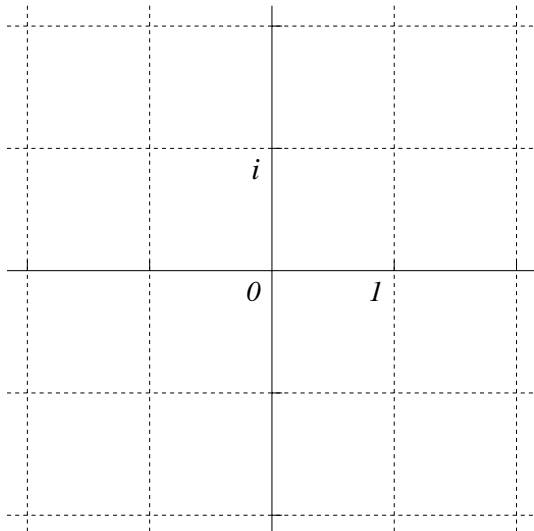


Name _____

Carefully sketch each of the collections of complex numbers. For each of them, answer the following questions (use Y for “yes” and N for “No”):

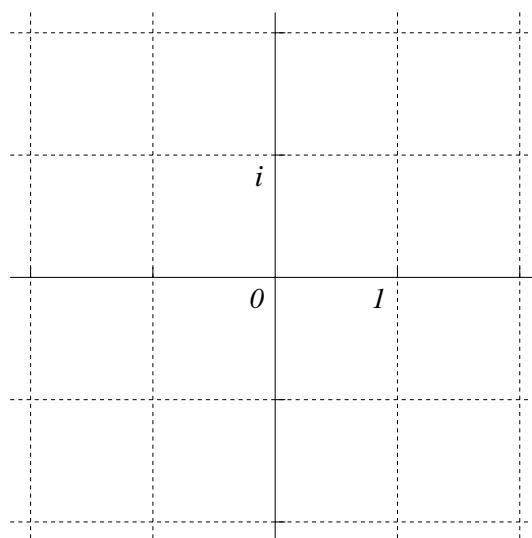
Is this set open? Is this set closed? Is this set a domain?

A: z 's so that $\operatorname{Re} z < 0$.



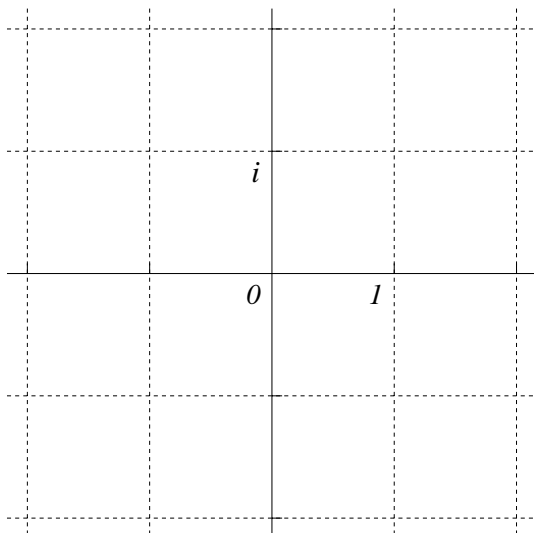
Open? ___ Closed? ___ A domain? ___

B: z 's so that $0 < |z| \leq 1$.



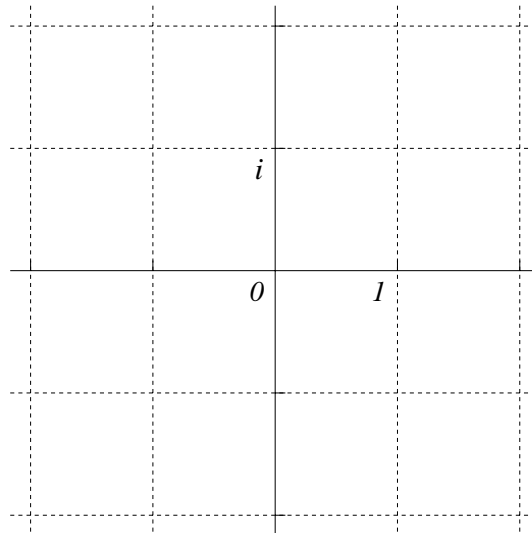
Open? ___ Closed? ___ A domain? ___

C: z 's so that $\frac{1}{2} < \operatorname{Im} z$ and $1 < |z| < 2$.



Open? ___ Closed? ___ A domain? ___

D: z 's so that $0 < \operatorname{Im} z < 1$ and $1 < |z| < 2$.



Open? ___ Closed? ___ A domain? ___