

Theory of Computation, CSCI 438 spring 2022
Polynomial Time, pg. 284-291, April 25

1. $PATH = \{ \langle G, s, t \rangle \mid G \text{ is a directed graph that has a directed path from } s \text{ to } t \}$
Prove that $PATH \in P$

- Two integers are relatively prime (or coprime) if there is no integer greater than one that divides them both.

$\text{RELPRIME} = \{ \langle x, y \rangle \mid x \text{ and } y \text{ are relatively prime} \}$

Prove that $\text{RELPRIME} \in \text{P}$