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UNIQUELY GEODESIC GROUPS

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ELDER, GARDAM, PIGGOT, TOWNSEND

GGT:

Geometric PROPERTIES

of GROUP (Cayley GRAPH)



Algebraic PROPERTIES of GROUP

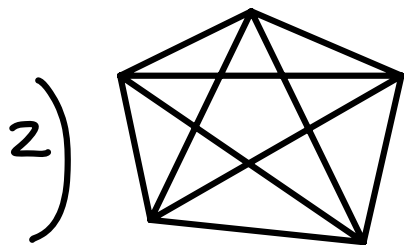
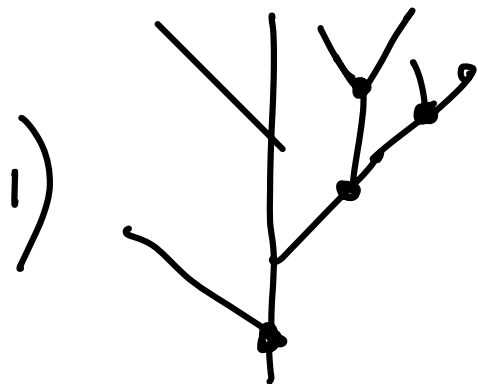
# PROPERTY

$\Gamma$  (Cay  $G$ ) is UNIQUELY

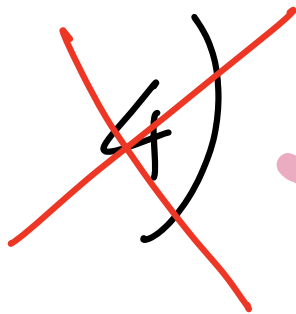
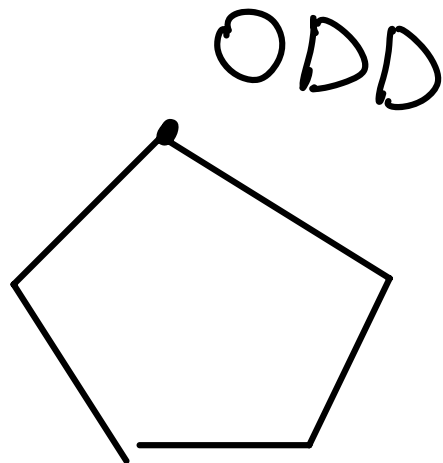
GEODESIC if  $\forall v_1, v_2 \in \Gamma^0$

$\exists!$  SHORTEST PATH BETWEEN  
THEM.

Ex 1



3)



EVEN

$\mathbb{Q}$

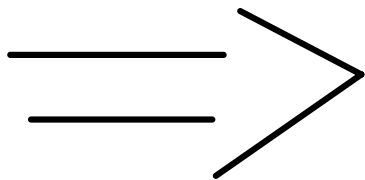
$G$  Uniq. Geod

$\mathbb{Q}$

$G$

Uniq.

Geod



?

THM (PAPASOGLU, ...)

$G$  U. G. + HYPERBOLIC

$\Rightarrow G$  VIRTUALLY FREE.

THM

$G$  U.G. group  $\Rightarrow$

$G$  hyperbolic  $(\Rightarrow$  v.f.)



THANK YOU

FOR YOUR

ATTENTION