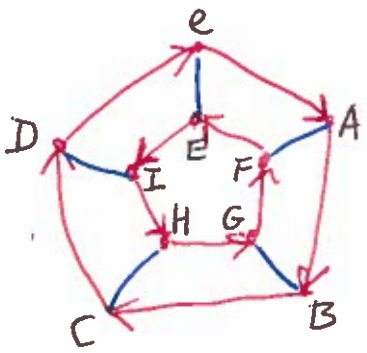
C5, edges 1-2-3-4-5-1
10 automorphisms forming D5

generators A E

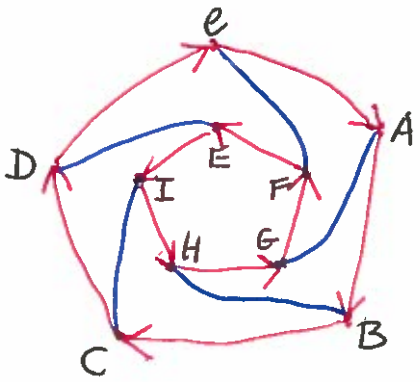


Permutations as mappings

e = 1 2 3 4 5
A = 2 3 4 5 1
B = 3 4 5 1 2
C = 4 5 1 2 3
D = 5 1 2 3 4

E = 1 5 4 3 2
F = 5 4 3 2 1
G = 4 3 2 1 5
H = 3 2 1 5 4
I = 2 1 5 4 3

generators A F



Permutations in cycle notation

e = (1)(2)(3)(4)(5)
A = (1 2 3 4 5)
B = (1 3 5 2 4)
C = (1 4 2 5 3)
D = (1 5 4 3 2)

E = (1)(2 5)(3 4)
F = (1 5)(3)(2 4)
G = (1 4)(2 3)(5)
H = (1 3)(2)(4 5)
I = (1 2)(3 5)(4)

Cayley graph has 10 vertices:
many possible sets of generators, say, AE, AF, EF

generators E F