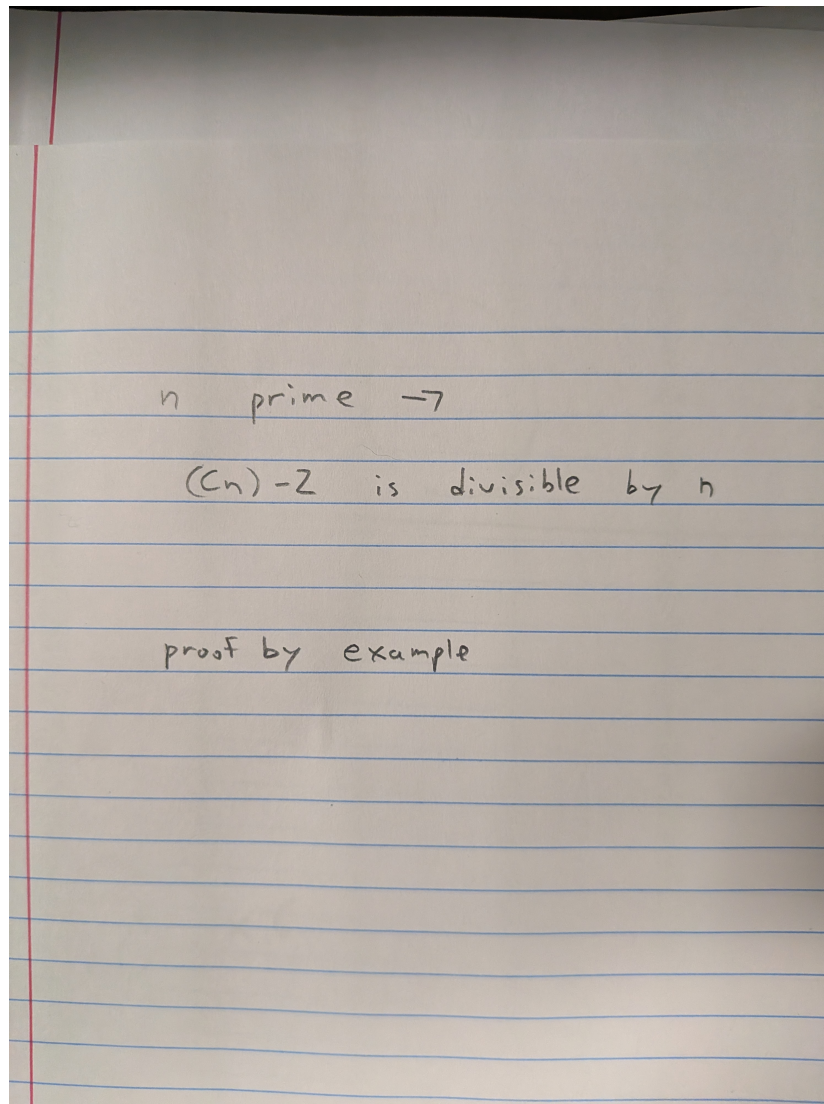


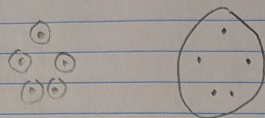
Catalan Number Theorem

Alex Glandon

April 2026



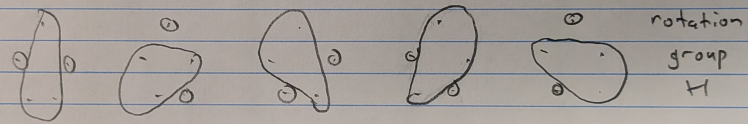
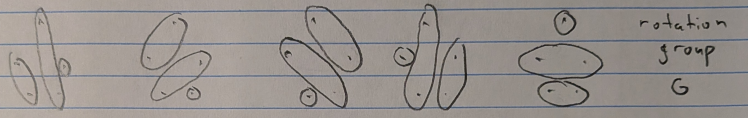
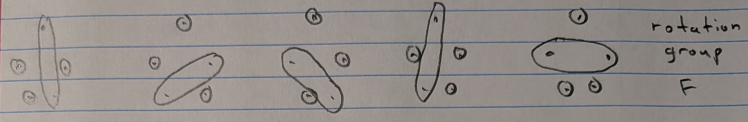
C_5 (5 is prime)



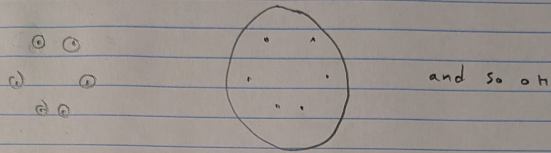
and so on

$(C_5) - Z = 5 \cdot 8$

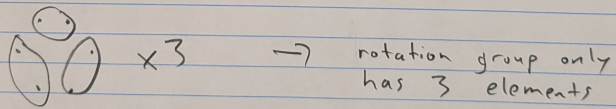
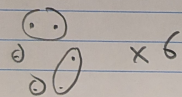
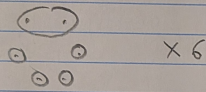
					rotation group A
					rotation group B
					rotation group C
					rotation group D
					rotation group E



C_6 (6 is not prime)



$$(C_6) - Z =$$



and so on

$$(C_6) - Z = 130, \text{ not divisible by } 6$$

(for G.S. Venkatesh)