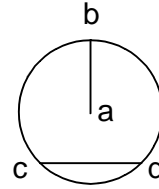


Kirkman's Schoolgirls Problem

Ref: Gerald Berman. Introduction to Combinatorics.

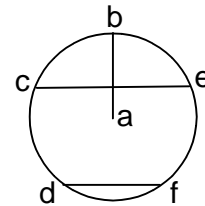
How can 4 schoolgirls walk in pairs on 3 days, so that each girl walk with a different girl on each day?

Mon	Tue	Wed
ab cd	ac bd	ad bc



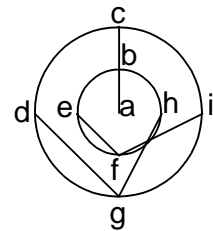
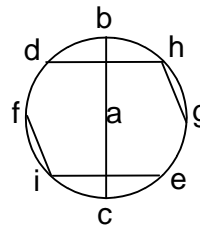
6 schoolgirls walk in pairs on 5 days

Mon	Tue	Wed	Thu	Fri
ab ce df	ac bd ef	ad be cf	ae bf cd	af bc de



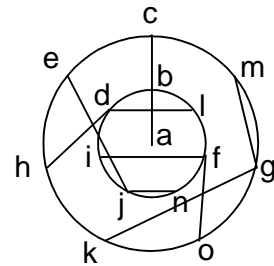
9 schoolgirls walk in threes on 4 days

Mon	Tue	Wed	Thu
abc dgh efi	ade bfh cgi	afg bdi ceh	ahi beg cdf



15 schoolgirls walk in threes on 7 days

Mon	Tue	Wed	Thu	Fri	Sat	Sun
abc dhl ejn fio gkm	ade bik cmo fhn gjl	afg bhj cln dim eko	ahi bmn ceg djo fkl	ajk blo cdf ehm gin	alm bef cij dkn gho	ano bdg chk eil fjm



16 schoolgirls walk in fours on 5 days

Mon	Tue	Wed	Thu	Fri
abcd ehmp fjko giln	aefg bhkn cimo djlp	ahij belo cgkp dfmn	aklm bfip cejn dgho	anop bgjm cfhl deik

