

How many ways can a student schedule 3 maths courses (Algebra, Geometry, Number Theory) in a 6 period day if no two maths courses can be taken in consecutive periods?

O X O X O X

X O X O X O

X O X O O X

X O O X O X

4 possible arrangements

O = maths

X = non-maths

Within each arrangement above, there are $3!$ ways to schedule the maths courses. So in total there are

$$4 \times 3! = \boxed{24}$$

possible schedules.