Prerequisite	Required for
Linear Algebra (W1)	Linear and Nonlinear Systems of Differential Equations (W2)
	Galois Theory (W2 & W4)
	Geometry of Spacetime (W2)
	Compressed Sensing (W2)
	Graph Coloring (W3)
	Quantum Mechanics of Pictures (W3)
	Problem Solving: Polynomials (W4)
Introduction to Graph Theory (W1)	Graph Coloring (W3)
Group Theory (W1)	Galois Theory (W2 & W4)
	Evasiveness (W2)
	How to Cut a Sandwich (W3)
	Sylow Theorems (W3)
	Geometry of Groups (W4)
Introduction to Ring Theory (W1)	Galois Theory (W2 & W3)
	When Factoring Goes Wrong (W4)
A Quick Introduction to Number Theory (W1)	Problem Solving: Number Theory (W2)
	Congruent Numbers & Elliptic Curves (W2 & W3)
	Quadratic Forms in Number Theory (W2)
	Geometry of Numbers (W4)
	Error–Correcting Codes (W4)
	Bernoulli Numbers (W4)
	When Factoring Goes Wrong (W4)
Moore Method Topology (W1) or	The Intermediate Value Theorem and Chaos (W3)
Real Analysis (W1) or Fractal Zoo (W2)	Scandalous Curves (W4)
Moore Method Topology (W1) or Fractal Zoo (W2)	How To Cut a Sandwich (W3)
Complex Analysis (W1 only)	Polynomial Fermat's Last Theorem (W3)
	Analytic Number Theory (W3)

Some important prerequisites...

<u>Note:</u> When subject A is listed as a prerequisite for course B, this indicates that the Mathcamp course on subject A is *sufficient* as a prerequisite for B.

Often, the Mathcamp class on A covers a lot more than is necessary for B. If you already know some of subject A, consult the specific prerequisites in the class description for B or talk to the teacher of B to find out if what you know is enough. You can also talk to the teacher of A to find out when she/he plans to cover the parts that you already know.

(Also see other side!)

Class	Requires
Analytic Number Theory (W3)	Complex Analysis (W1)
Bernoulli Numbers (W4)	A Quick Introduction to Number Theory (W1)
Compressed Sensing (W2)	Linear Algebra (W1)
Congruent Numbers & Elliptic Curves (W2 & W3)	A Quick Introduction to Number Theory (W1)
Error–Correcting Codes (W4)	A Quick Introduction to Number Theory (W1)
Evasiveness (W2)	Group Theory (W1)
Galois Theory (W2 & W4)	Group Theory (W1)
	Linear Algebra (W1)
	Introduction to Ring Theory (W1)
Geometry of Groups (W4)	Group Theory (W1)
Geometry of Numbers (W4)	A Quick Introduction to Number Theory (W1)
Geometry of Spacetime (W2)	Linear Algebra (W1)
Crark Calaring (W2)	Introduction to Graph Theory (W1)
Graph Coloring (W3)	Linear Algebra (W1)
How to Cut a Condruich (W2)	Group Theory (W1)
now to cut a sandwich (WS)	Moore Method Topology (W2) or Fractal Zoo (W2)
Linear and Nonlinear Systems of Differential Equations (W2)	Linear Algebra (W1)
Polynomial Fermat's Last Theorem (W3)	Complex Analysis (W1)
Problem Solving: Number Theory (W2)	A Quick Introduction to Number Theory (W1)
Problem Solving: Polynomials (W4)	Linear Algebra (W1)
Quadratic Forms in Number Theory (W2)	A Quick Introduction to Number Theory (W1)
Quantum Mechanics (W3)	Linear Algebra (W1)
Scandalous Curves (W4)	Some topology or analysis [*] (W1–2)
Sylow Theorems (W3)	Group Theory (W1)
Tiling, Groups, and Orbifolds (W4)	Group Theory (W1)
The Intermediate Value Theorem and Chaos (W3)	Some topology or analysis [*] (W1–2)
When Eactoring Coos Wrong $(W4)$	A Quick Introduction to Number Theory (W1)
when ractoring Goes wrong (W4)	Introduction to Ring Theory (W1)

Have a class you want to take? Here are the prerequisites!

*Some topology or analysis: Moore Method Topology (W1) OR Real Analysis (W1) OR Fractal Zoo (W2) (Also see other side!)