


# 2018 Mathematical Olympiad Summer Program Schedule

Sun Jun 3	Mon Jun 4	Tue Jun 5	Wed Jun 6	Thu Jun 7	Fri Jun 8	Sat Jun 9
<i>(red G5222)</i> <i>(green MMA14)</i> <i>(blue W8201)</i> <i>(blue W8220)</i> <i>(black G4101)</i> <i>(black G4102)</i>	<b>IL</b> Triangle centers <b>LH</b> Jensen-type <b>ML</b> Counting <b>TS</b> Invariants <b>VW</b> Linear algebra <b>VW</b> Linear algebra	<b>ML</b> Counting 1 <b>EC</b> Euclid alg <b>PL</b> Graph theory <b>SR</b> Great ideas <b>VW</b> Fields and Frob <b>LH</b> Ramsey theory	<b>JM</b> Graph theory <b>YL</b> $v_p$ <b>EC</b> DDIT <b>LH</b> Generat funct <b>SR</b> Great ideas <b>IL</b> Combin geom	<b>IL</b> Cyclic quads <b>SR</b> Great ideas <b>ML</b> Project transf <b>MG</b> Primes <b>PL</b> Graph theory <b>ZS</b> Sequences	<b>PL</b> Graph theory <b>LH</b> Number theory <b>IL</b> Combin geom <b>VW</b> Polynomials <b>AL</b> Moves <b>CL</b> Geom ineq	
	<b>LH</b> Jensen-type <b>IL</b> Triangle centers <b>VW</b> Polynomials <b>TS</b> Invariants <b>ML</b> Counting <b>ML</b> Counting	<b>EC</b> Euclid alg <b>ML</b> Counting 1 <b>YL</b> Formulas <b>SR</b> Great ideas <b>TS</b> Invariants <b>LH</b> Ramsey theory	<b>YL</b> $v_p$ <b>JM</b> Graph theory <b>LH</b> Generat funct <b>PL</b> Graph theory <b>SR</b> Great ideas <b>EC</b> DDIT	<b>SR</b> Magic ineq <b>IL</b> Cyclic quads <b>TS</b> Inversion <b>ZS</b> Sequences <b>PL</b> Graph theory <b>ML</b> Project transf	<b>LH</b> Number theory <b>PL</b> Graph theory <b>YY</b> Constructions <b>TS</b> Inequalities <b>RA</b> Combin seq <b>VW</b> Polynomials	
<i>(afternoon)</i>	Homework Rvw	MOP Test 1	Assembly	MOP Test 2	Study	Mock IMO 1
<i>(optional)</i>			<b>PL</b> Seminar		<b>ML</b> $ S  < 0$	

Sun Jun 10	Mon Jun 11	Tue Jun 12	Wed Jun 13	Thu Jun 14	Fri Jun 15	Sat Jun 16
	<b>IL</b> Collinear/concur <b>YY</b> Constructions <b>PL</b> Combin sets <b>ML</b> Quadr residue <b>VW</b> $\mathbb{C}$ geometry <b>MS</b> Random walks	<b>PL</b> Combin sets <b>ML</b> Quadr residue <b>MS</b> Random walks <b>VW</b> Manip and bound <b>EC</b> Grinding <b>SR</b> Hat color	<b>EC</b> Grinding <b>JM</b> $\star$ jections <b>LH</b> Strategy <b>CL</b> Geom ineq <b>AL</b> Elliptic curves <b>MS</b> Rigorous analysis	<b>EC</b> USAMO 2013/3 <b>IL</b> Loci <b>MS</b> Rigorous analysis <b>SR</b> Hat color <b>PL</b> Combin sets <b>TS</b> Inversion	<b>PL</b> Extrem combin <b>ML</b> Counting 2 <b>IL</b> Inversion <b>AL</b> Cycles <b>LH</b> Chebyshev poly <b>VW</b> Algebraic NT	
	<b>YY</b> Constructions <b>IL</b> Collinear/concur <b>TS</b> <b>PL</b> Combin sets <b>NE</b> Designs <b>NE</b> Designs	<b>ML</b> Quadr residue <b>PL</b> Combin sets <b>EC</b> Grinding <b>IL</b> Pell eqn <b>TS</b> Grownup geo <b>SR</b> Hat color	<b>JM</b> $\star$ jections <b>EC</b> Grinding <b>LH</b> Strategy <b>TS</b> <b>VW</b> Pow series $\mathbb{Z}_p$ <b>YL</b> Beyond Markov		<b>ML</b> Counting 2 <b>PL</b> Extrem combin <b>VW</b> Algebraic NT <b>TS</b> <b>LH</b> Chebyshev poly <b>MS</b> Hard combo	
	Escape room	MOP Test 3	Philosophy	MOP Test 4	Study	Mock IMO 2
	<b>NE</b> Seminar		<b>IL</b> Seminar		<b>LH</b> Seminar	

Sun Jun 17	Mon Jun 18	Tue Jun 19	Wed Jun 20	Thu Jun 21	Fri Jun 22	Sat Jun 23
	<b>SR</b> Polynomials <b>ZS</b> Sequences <b>EC Legend ineq</b> <b>YL</b> Legend FE <b>VW</b> Hard ideas <b>RL</b> Count in 2 ways	<b>RL</b> Angle chasing <b>YS</b> Combin sums <b>OA</b> <b>MS</b> Farey seqs <b>EC RMM 2017/6</b> <b>LH</b> Strategy	<b>JM</b> Number theory <b>CL</b> Romanian alg <b>RL</b> Cyclic quads <b>EC USAMO 2013/3</b> <b>PL</b> Extrem combin <b>MS</b> Hard combo	<b>PL</b> Combin recap <b>SR</b> Cross ratio <b>AZ</b> Seq/series <b>VW</b> Diophant eq <b>AB</b> Weird geo <b>YS</b> Steepest descent	<b>MS</b> Size in NT <b>TS</b> Induction <b>PL</b> Extrem combin <b>AZ</b> Synth+comput <b>VW</b> Analytic NT <b>SR</b> Tame the cube	
	<b>ZS</b> Sequences <b>SR</b> Polynomials <b>RL</b> Count in 2 ways <b>VW</b> Stuff mod $p^r$ <b>EC Legend ineq</b> <b>AB</b> Legend FE	<b>YS</b> Combin sums <b>RL</b> Angle chasing <b>EC RMM 2017/6</b> <b>TL</b> <b>VW</b> Eq mod $p$ , Weil <b>LH</b> Strategy	<b>CL</b> Romanian alg <b>JM</b> Number theory <b>YS</b> Smoothing <b>EC SL 2013/N7</b> <b>RL</b> Collinear/concur <b>PL</b> Extrem combin	<b>SR</b> Combin philos <b>PL</b> Combin recap <b>TS</b> <b>CL</b> Romanian alg <b>AB</b> Weird geo <b>AZ</b> Seq/series	<b>TS</b> Induction <b>MS</b> Size in NT <b>YS</b> $\mathbb{C}$ geometry <b>VW</b> Analytic NT <b>AZ</b> Synth+comput <b>SR</b> Tame the cube	
Two Sigma	Study	TSTST 1	Assembly	TSTST 2	Study	TSTST 3
	<b>RL</b> Seminar		<b>SR</b> Seminar		<b>CL</b> $1 + 2 + \dots = -\frac{1}{12}$	

Sun Jun 24	Mon Jun 25	Tue Jun 26	Wed Jun 27	Thu Jun 28	Fri Jun 29	Sat Jun 30
	<b>YS</b> Interpolation <b>TS</b> Invariants <b>AZ</b> Suff large $p$ <b>SR</b> Tame the cube <b>MS</b> Size in NT <b>ML</b> Hyprplan arrng	<b>CL</b> Algeb integers <b>SR</b> Lift exponent <b>ML</b> Hyprplan arrng <b>AZ</b> Geom motifs <b>PL</b> Probab combin <b>TS</b>	Departure			
	<b>TS</b> Invariants <b>YS</b> Interpolation <b>MS</b> Size in NT <b>SR</b> Tame the cube <b>AZ</b> Suff large $p$ <b>YL</b> Analysis bound	<b>SR</b> Lift exponent <b>EC SL 2013/N7</b> <b>YS</b> Interpolation <b>CL</b> Algeb integers <b>PL</b> Probab combin <b>AZ</b> Geom motifs	Departure			
	Study	Beyond MOP				
	<b>YS</b> 0 know proof	Closing				