

## 2008 Mathematical Olympiad Summer Program Schedule

Sun Jun 8	Mon Jun 9	Tue Jun 10	Wed Jun 11	Thu Jun 12	Fri Jun 13	Sat Jun 14
<i>(red 1)</i> <i>(red 2)</i> <i>(blue)</i> <i>(black)</i>		Students arrive	<b>GRAD</b> Proof writing <b>GRAD</b> Proof writing <b>JNB</b> Number theory 1 <b>ZF</b> Miquel's Theorem	<b>IL</b> Number theory 1 <b>CJ</b> Counting strats 1 <b>RG</b> Induction <b>JNB</b> Diophantine eq	<b>CJ</b> Bijections <b>AN</b> Trig geometry <b>JNB</b> Number theory 3 <b>ZF</b> Residue classes	<b>IL</b> Number theory 2 <b>AM</b> Games Mock IMO 1
		Students arrive	<b>CJ</b> Counting strats 1 <b>IL</b> Number theory 1 <b>RG</b> Functional equations <b>JNB</b> Sequences	<b>CJ</b> Counting strats 2 <b>AN</b> Polynomials <b>IL</b> Geometry 1 <b>RG</b> Complex numbers	<b>AN</b> Trig geometry <b>CJ</b> Bijections <b>RG</b> Combin of sets <b>IL</b> Comb arguments	<b>AM</b> Games <b>IL</b> Number theory 2 Mock IMO 1
		Students arrive	<b>GRAD</b> Homework review	<b>AN</b> Polynomials <b>CJ</b> Counting strats 2 <b>JNB</b> Number theory 2 <b>ZF</b> Revisiting the Lemma!	Test 1	
			Study time	Study time	Study time	

Sun Jun 15	Mon Jun 16	Tue Jun 17	Wed Jun 18	Thu Jun 19	Fri Jun 20	Sat Jun 21
<i>(red 1)</i> <i>(red 2)</i> <i>(blue)</i> <i>(black)</i>	<b>RG</b> Classical geom <b>JNB</b> AM-GM, majoriz <b>IL</b> Geometry 2 <b>ZF</b> Cauchy and weights in AM-GM	<b>AH</b> Discriminant ineqs <b>JNB</b> Roots of unity <b>ZF</b> Weights & coloring <b>PRL</b> Diophantine eq	<b>ZF</b> Special angles <b>YS</b> Complex numbers <b>IL</b> Geometry 3 <b>JNB</b> Quadratic recipr	<b>JNB</b> Roots of unity <b>KM</b> Combin geom <b>PRL</b> Diagrams <b>GC</b> Graph theory	<b>CJ</b> Counting in 2 ways <b>ZF</b> Pigeonhole <b>PRL</b> Geom ineqs <b>GC</b> Stuff modulo $p$	<b>PRL</b> Angle chasing <b>AG</b> Inequalities Mock IMO 2
	<b>JNB</b> AM-GM, majoriz <b>RG</b> Classical geom <b>CJ</b> Sequences <b>BL</b> Trig and algebra	<b>CJ</b> Induction <b>IL</b> Number theory 3 <b>RG</b> Cyclic polygons <b>ZF</b> Geom calculation	<b>YS</b> Complex numbers <b>ZF</b> Special angles <b>CJ</b> Recursions <b>PRL</b> Induction	<b>CJ</b> Recursions <b>IL</b> Number theory 4 <b>JNB</b> Number theory 4 <b>PRL</b> Diagrams	<b>ZF</b> Pigeonhole <b>CJ</b> Counting in 2 ways <b>GC</b> Invariants <b>RG</b> Induction & more	<b>AG</b> Inequalities <b>PRL</b> Angle chasing Mock IMO 2
Team contest 1	Test 2	<b>IL</b> Number theory 3 <b>CJ</b> Induction <b>AG</b> Inequalities 1 <b>JNB</b> Completeness	Test 3	<b>IL</b> Number theory 4 <b>CJ</b> Recursions <b>GC</b> Roots of unity <b>AG</b> Inequalities	Test 4	
Test review	Study time	Test review	Study time	Test review		

Sun Jun 22	Mon Jun 23	Tue Jun 24	Wed Jun 25	Thu Jun 26	Fri Jun 27	Sat Jun 28
<i>(red 1)</i> <i>(red 2)</i> <i>(blue)</i> <i>(black)</i>	<b>PSL</b> Collinear/concur <b>PRL</b> Triangle centers <b>AG</b> Polynomials 1 <b>GC</b> Affine geometry	<b>PSL</b> Graph theory 1 <b>IL</b> Number theory 5 <b>AN</b> Generating funct <b>ZF</b> Complex analysis	<b>AN</b> Games <b>RG</b> Functional equations <b>AG</b> Functional eqns 1 <b>PSL</b> Probabilistic combin	<b>PSL</b> Graph theory 2 <b>IL</b> Number theory 6 <b>AG</b> Polynomials 2 <b>GC</b> Enum/bijections	<b>ZF</b> Well-ordering <b>PRL</b> Circles <b>AG</b> Functional eq 2 <b>PSL</b> Algeb combin	<b>PSL</b> Smoothing <b>JNB</b> $[x]$ & $[x]$ Mock IMO 3
	<b>PRL</b> Triangle centers <b>PSL</b> Collinear/concur <b>JNB</b> Number theory 5 <b>AM</b> Number theory	<b>IL</b> Number theory 5 <b>PSL</b> Graph theory 1 <b>AG</b> Inequalities 2 <b>RG</b> Vectors	<b>RG</b> Functional equations <b>AN</b> Games <b>PSL</b> Smoothing <b>GC</b> Jensen	<b>IL</b> Number theory 6 <b>PSL</b> Graph theory 2 <b>RG</b> Geom transform <b>ZF</b> Geom: approaches	<b>PRL</b> Circles <b>ZF</b> Well-ordering <b>PSL</b> Adv combin <b>GC</b> Num-theo functs	<b>JNB</b> $[x]$ & $[x]$ <b>PSL</b> Smoothing ELMO Mock IMO 3
Team contest 2	Test 5	<b>AN</b> Invariants <b>JNB</b> Cauchy <b>PSL</b> Graph theory 1 <b>GC</b> Invariants	Test 6	<b>JNB</b> Cauchy <b>AN</b> Invariants <b>PSL</b> Graph theory 2 <b>RG</b> Functional eqns	Test 7	ELMO coordin
Test review	Study time	Test review	Study time	Test review		

Sun Jun 29	Mon Jun 30	Tue Jul 1	Wed Jul 2	Thu Jul 3	Fri Jul 4	Sat Jul 5
<i>(red 1)</i> <i>(red 2)</i> <i>(blue)</i> <i>(black)</i>	<b>IL</b> Number theory 7 <b>PRL</b> Geom transform <b>GC</b> Enum/bijections <b>RG</b> Geom transformations	<b>RG</b> Cyclic polygons <b>PRL</b> Geom ineqs <b>IL</b> Geometry 4 <b>GC</b> Angle chasing	<b>IL</b> Number theory 8 <b>JNB</b> Recurrences <b>GC</b> Extremal arguments <b>PRL</b> Recurrences	Students depart		
ELMO coordin	<b>PRL</b> Geom transform <b>IL</b> Number theory 7 <b>AG</b> Inequalities 3 <b>GC</b> Extremal argum	<b>PRL</b> Geom ineqs <b>RG</b> Cyclic polygons <b>AG</b> Polynomials 3 <b>ZF</b> Sequences/series	<b>JNB</b> Recurrences <b>IL</b> Number theory 8 <b>AG</b> Num-theo problems <b>GC</b> Combin num theory	Students depart		
Team contest 3	Test 8	<b>ZB</b> Multiplicative funct <b>YS</b> Trig tricks <b>ZF</b> Problems w/ grids <b>AG</b> Polynomials		Students depart		
Test review	Study time	Test review	Awards ceremony / Hall of fame			