

**JHMT 2013 Probability and Combinatorics Test
SOLUTIONS**

Problem 1. $\frac{1}{2}$

Problem 2. $\frac{11}{5}$

Problem 3. 2880

Problem 4. 204

Problem 5. 55

Problem 6. 13

Problem 7. 3657214

Problem 8. 470

Problem 9. 654

Problem 10. $\frac{n!}{2^{n(n-1)/2}}$