

# 2006 IWYMIC Answers

## Individual

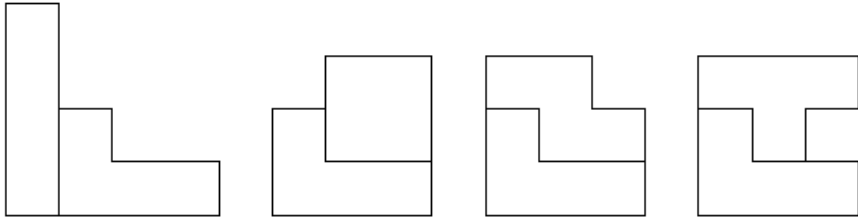
### Part I

1.	5	2.	3	3.	12°	4.	B
5.	3	6.	1	7.	273	8.	$\frac{4}{5}$
9.	$-\frac{2}{3}$	10.	32	11.	108	12.	104

### Part II

1.	5	2.	$\frac{\sqrt{85}}{2}$	3.	3
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### Team

1.	C	2.	72°, 90°, 108°, 126°, 132°																														
3.																																	
4.	<table border="1" style="margin: auto; border-collapse: collapse; text-align: center;"> <tr><td>1</td><td>1</td><td>3</td><td>5</td><td>2</td><td>3</td></tr> <tr><td>1</td><td>4</td><td>3</td><td>1</td><td>5</td><td>2</td></tr> <tr><td>2</td><td>4</td><td>5</td><td>5</td><td>3</td><td>2</td></tr> <tr><td>3</td><td>3</td><td>1</td><td>1</td><td>2</td><td>4</td></tr> <tr><td>2</td><td>5</td><td>4</td><td>5</td><td>4</td><td>4</td></tr> </table>	1	1	3	5	2	3	1	4	3	1	5	2	2	4	5	5	3	2	3	3	1	1	2	4	2	5	4	5	4	4	5.	114, 133, 152, 171, 190, 209, 228, 247, 266, 285 and 399
1	1	3	5	2	3																												
1	4	3	1	5	2																												
2	4	5	5	3	2																												
3	3	1	1	2	4																												
2	5	4	5	4	4																												
6.	<p>(a) Betty</p> <p>(b) If <math>n</math> is even, Betty can use the same winning strategy. If <math>n</math> is odd, Alice has a winning strategy.</p>	8.	2013021																														
9.	$\frac{1}{9}$	10.	1156, 1296, 1369, 1600 and 1764																														