

ANSWERS - Round 1, 2008.

ROUND	Question 1.	Question 2.	Question 3.	Question 4.
1	Q1. $\frac{5}{4}$	Q2. $x = \pm 1$		
2	Q1. $a = b = -2$	Q2. $x + 2y + 6 = 0$		
3	Q1. $A = 5$ $B = -5$	Q2. 2		
4	Q1. $3 - 2i$	Q2. $\frac{3}{4}$		
5	Q1. $\frac{1}{33}$	Q2. $x = 6$		
6	Q1. $\frac{1}{96}$	Q2. $x = 60$		
7	Q1. $\frac{1}{4\sqrt{2}}$	Q2. 4	Q3. $\frac{1}{3}$	Q4. $5x + 8y - 18 = 0$
8	Q1. $(4, -1), (-4, 1)$	Q2. $\frac{\pi}{4}$	Q3. $\ln 2$	Q4. $6\sqrt{3}$

Tie-break – R1, 2008

Question	Answer
1	$2\sqrt{11}, 3\sqrt{5}, 4\sqrt{3}, 7, 5\sqrt{2}$
2	$\frac{3}{4}$
3	$-\sin x$
4	$x = \pm 4, y = \pm 6.$
5	$n + 1$
6	$\angle bde$
7	$4(x - 2y)(x + 2y)$
8	$a^3 - 3a^2b + 3ab^2 - b^3$
9	120
10	23