

# 2014 Team Scramble Answer Key

$20\sqrt{13}$	1	90	26	25	51	1005	76
$\frac{11}{24}$	2	$2\sqrt{14}$	27	60	52	24	77
$7.77 \times 10^{-4}$	3	$\frac{81\sqrt{3}}{2}$	28	128	53	$\frac{2}{9}$	78
396	4	$9\sqrt{2}$	29	$120^\circ$	54	$\frac{9}{25}$	79
35	5	Centroid	30	$25^\circ 42' 51''$	55	$\frac{31031}{46656}$	80
$5^3\sqrt{7}$	6	16	31	$\frac{\sqrt{650}}{26}$	56	384	81
WYXZ	7	$96\sqrt{3}$	32	$(4, -4\sqrt{3}, 2)$	57	7,870.13	82
$(-2, 1, 3, 2)$	8	$14\pi$	33	60	58	$\frac{4}{5}$	83
$\frac{2887}{31}$	9	$240\pi$	34	$3\frac{29}{72}$	59	1	84
650	10	29	35	231,750	60	630	85
$-\frac{7}{4}$	11	$\frac{45}{2}$	36	$-2v^4 + 26v^2 - 24v$	61	1,021	86
$-\frac{3}{2}, 4$	12	$2, \frac{5}{2}$	37	$(1, -2, -1)$	62	24,745,500	87
4661	13	4	38	“to the right of”	63	$\begin{bmatrix} 1 \\ -1 \end{bmatrix}, \begin{bmatrix} 2 \\ 1 \end{bmatrix}$	88
$\frac{72}{13}$	14	$[0, 2)$	39	115,080	64	18	89
$y = -\frac{3}{2}x + \frac{1}{2}$	15	$\frac{3}{4}$	40	8	65	50	90
$(-\frac{7}{2}, -6)$	16	$(2, -6)$	41	$\frac{72}{5}$	66	93,648	91
$(-7, -11)$	17	24	42	95	67	C, G, H (any order)	92
$(0, -6)$	18	100,899	43	$\frac{512\sqrt{2}}{3}$	68	DFEBHAJGIC	93
$(\frac{6+2\sqrt{6}}{3}, 0)$	19	14796, 82608	44	13	69	$\frac{-5+\sqrt{33}}{2}$	94
3,-8	20	0	45	$\frac{65\pi}{4}$	70	$\sqrt{277}$	95
5	21	831,600	46	18	71	9	96
28	22	10,416	47	$\frac{26}{23}$	72	$\csc u \cot u$	97
45	23	96,230	48	12	73	$576\sqrt{3}$	98
3	24	$\frac{243}{2}$	49	$\frac{3n}{np+1}$	74	$f(x) = \frac{1}{x^2}$ $f'(2)$	99
$76 + \pi$	25	3	50	$21122_3$	75	1	100