

2014 Four-by-Four Competition
Answer Key

| | | | | | |
|-----|--------------------------------|-----------|-----|--|-----------|
| 1. | (17,6) | 1 | 21. | 70,000 | 21 |
| 2. | $72\sqrt{3}$ | 2 | 22. | 200 | 22 |
| 3. | $-41 - 1041i$ | 3 | 23. | (any order) $-\frac{4}{3}, \frac{27}{8}$ | 23 |
| 4. | $\frac{11}{36}$ | 4 | 24. | 516 | 24 |
| 5. | 135 | 5 | 25. | (-2, 7) | 25 |
| 6. | 80 | 6 | 26. | $3\sqrt{106}$ | 26 |
| 7. | 3837 | 7 | 27. | 5 | 27 |
| 8. | $\left(-1, \frac{5}{6}\right)$ | 8 | 28. | 576 | 28 |
| 9. | $\frac{64}{729}$ | 9 | 29. | 373,860 | 29 |
| 10. | 13 | 10 | 30. | 611 | 30 |
| 11. | 14 | 11 | 31. | 8 | 31 |
| 12. | 90 | 12 | 32. | 46 | 32 |
| 13. | 1050.3 | 13 | 33. | 7 | 33 |
| 14. | $\frac{7\pi\sqrt{30}}{30}$ | 14 | 34. | 47 | 34 |
| 15. | 180π | 15 | 35. | $3x - 2y - 4z = 18$ | 35 |
| 16. | 1344 | 16 | 36. | 1.8 | 36 |
| 17. | π | 17 | 37. | 27 | 37 |
| 18. | 2751 | 18 | 38. | $9\sqrt{6} - 9\sqrt{2}$ | 38 |
| 19. | $56 + 21\pi$ | 19 | 39. | 4 | 39 |
| 20. | $\frac{264}{4165}$ | 20 | 40. | 19 | 40 |

2014 Four-by-Four Competition
Answer Key