

TEAM ROUND ANSWERS

1. 234
2. 36
3. 721
4. 1030
5. $8\sqrt{5}$
6. 2
7. $(4, -1)$
8. 84
9. 43
10. 54

INDIVIDUAL ROUND ANSWERS

1. 0
2. 72
3. $\frac{5\sqrt{5}}{3\sqrt{13}} = \frac{5\sqrt{65}}{39}$
4. 96π
5. $\frac{1}{256}$
6. $\sqrt{\frac{10}{13}} = \frac{\sqrt{130}}{13}$
7. $\frac{2}{5}$
8. 24

RELAY ROUND ANSWERS

- 1A. 109
- 1B. 1
- 1C. 17
- 2A. 3
- 2B. -2
- 2C. $\frac{20}{147}$

DEVIL ROUND ANSWERS

1. $\frac{28}{55}$
2. 512
3. 0
4. 2^{p-1}
5. $\frac{9}{10}\pi$
6. 1144
7. 1
8. 11
9. 2
10. 30
11. $\frac{a}{4}$
12. $\frac{1}{2}$
13. $\frac{1}{3}$
14. 720
15. 40

TIEBREAKER ROUND ANSWERS

1. $1 + \sqrt{3}$
2. $(\frac{2}{7}, \frac{4}{7}, \frac{6}{7})$
3. 12
4. $(2, 2), (\frac{1}{2}, \frac{1}{2}), (\frac{3-\sqrt{5}}{4}, \frac{3+\sqrt{5}}{4}), (\frac{3+\sqrt{5}}{4}, \frac{3-\sqrt{5}}{4})$