# 2022 Chantilly Math Competition Answers

#### Chantilly Math Competition Club

#### May 28 2022

## I Algebra

- 1. D. 1
- 2. A. -2
- 3. C. 20
- 4. 64
- 5. 1

## II Geometry

- 6. B. 62°
- 7. C. 256
- 8. A.  $117\sqrt{3} 48\pi$
- 9. 23
- 10. 135

# III Probability/Statistics

- 11. C.  $\frac{11}{15}$
- 12. A.  $\frac{1}{8}$
- 13. B. 300
- 14. 56
- 15. 125

# IV Number Theory

- 16. C. 1
- 17. C. 2420
- 18. B. Thursday
- 19. 161
- 20. 2

### V Estimation

- $21. \ 36.2964$
- $22. \ 0.2222$

### VI Advanced

- 23.  $(2+n) \cdot 2^{n-1}$
- 24. 4
- 25.  $\pi(n-2-2\sum_{k=3}^{n}\frac{1}{k})$