

2025 June AMC8 Week 2 Day 2 - The Sum of a Finite Arithmetic Series

1 (1分) A town hall clock chimes the hour number on every full hour and once on every half-hour. How many chimes will occur in a full **24**-hour period?

- A. **24** B. **90** C. **156** D. **180** E. **270**

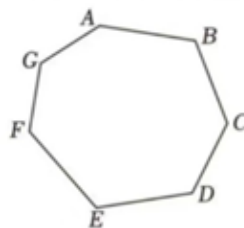
2 (1分) Four campers—Alice, Bob, Charlie, and Diana—play a number-reporting game around a campfire. In Round **1**, Alice reports **1**, Bob reports **2** and **3**, Charlie reports **4, 5, 6**, and Diana reports **7, 8, 9, 10**. In Round **2**, Alice continues with **11** through **15**, maintaining the same pattern. How many numbers did Alice report in the first five rounds?

- A. **13** B. **17** C. **30** D. **45** E. **50**

3 (1分) **37** students line up to count consecutively starting at **1**, with each subsequent number increasing by **3**. One student erroneously subtracts **3** instead, resulting in a total sum of **2011**. Which student made the counting error?

- A. **32** B. **33** C. **34** D. **35** E. **36**

4 (1分) A game piece starts at vertex **A** of a heptagon board labeled **A, B, C, D, E, F, G** clockwise. Players move the piece **10** times following this rule: on the **k**-th move, jump **k** vertices clockwise. Which vertices remain unvisited after **10** moves?



- A. **C, E, and F** B. **E, F** C. **C, E** D. **B, C and F**
E. **C, F**

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(1分) A retirement community has **20** residents with integer ages summing to **1520**. The oldest resident is aged > 90 but ≤ 100 , while the remaining **19** residents have consecutive ages. What is the age range of the community?

A. 19

B. 29

C. 30

D. 66

E. 95