## Holiday Themed!

1. In days, How long does Hanukkah last?

2. In what year (Common Era) was the first Christmas celebrated?

3. How long ago (in years) was the first candy cane made?

## PMC Themed!

4. How long ago did Pleasanton Math Circle begin?

5. How many students are at this meeting?

6. What is the sum of your lecturers' ages in months?

## Math Themed!

7 How many circular cookies of radius 1 can fit on a $6 \times 23$ rectangular plate?

8 How many digits does $2018^{2018}$ have?

9. What is the 2018th prime number?

## Technology Themed!

10. What is the average amount of minutes spent on social media per day?

11. On average, how many more dollars does it cost to buy an Apple device than an Android device?

12. How many mobile apps, in billions, were downloaded this year?

## Christmas Records!

13. In feet, how tall is the tallest natural Christmas tree?

14. How long, in feet, is the longest candy cane?

15. What is the price of the most expensive tree, in dollars?

## Movie Time

16. The runtime of *The Grinch* in minutes

17. How many dollars, in millions, did actor George Clooney make in the last year?

18. How many years ago was Disney created?

## Food

19. A Scoville Unit is used to measure spiciness. For example, the jalapeno has about 4000 Scoville units. What is the Scoville rating of the spiciest pepper in the world, the Carolina Reaper?

20. In pounds, how heavy is the heaviest cake that has been made?

21. (True/False) The answer to each of these questions is either true or false. You may answer each question either true or false, or leave it blank. If you answer any of the questions incorrectly, then you will receive a 0 on this problem. Otherwise, if you answer $n$ questions correctly, you will receive $(n-2)(n-1)$ points. **Circle** the numbers of statements you think are true and **cross out** the numbers of statements you think are false. Do not mark numbers of statements which you are unsure of.

1. Three out of the six statements are false
2. There are three high schools in the Pleasanton Unified School District
3. Three of your lecturers are going to college next year
4. There are nine elementary schools in the Pleasanton Unified School District
5. This school is located on 3900 Valley Avenue
6. All of your lecturers attend Amador Valley High School

# Guts Answers

**Set 1**    1. 8    2. 336    3. 348

**Set 2**    4. 7    5. ???    6. 997

**Set 3**    7. 33    8. 6670    9. 17467

**Set 4**    10. 135    11. 433    12. 197

**Set 5**    13. 221    14. 112    15. 11,026,900

**Set 6**    16. 105    17. 239    18. 95

**Set 7**    19. 2,200,000    20. 15032    21. -OXOXX