Problems
As 2018 comes to an end, let's go back and solve some of our favorite problems of year.

School Handbook
Problem 237: Kendra starts at a positive integer $k$ and counts up by 4s until she hits exactly 200. Mason starts at a positive integer $m$ and counts up by 6s until he hits exactly 200. If it takes Kendra half as many steps to reach 200 as it takes Mason, what is the greatest possible value of $k - m$?

School Competition
Sprint 23: A bag contains 25 tickets, each colored either red or yellow. Red tickets are worth $0.50, and yellow tickets are worth $5.00. If the expected value of a ticket drawn at random from this bag is $3.20, how many of the tickets are red?

Chapter Competition
Target 5: Aiden and Bryce are racing around a race track. They begin together at the starting line, and Aiden’s car completes a lap every 44 seconds, while Bryce’s car completes a lap every 40 seconds. How many seconds after they begin the race will Aiden and Bryce first reach the starting line at the same time?

National Competition
Winning Countdown Question: The first three terms of an infinite arithmetic sequence are 3.46, 2.47 and 1.48, in that order. What is the first integer term in this sequence?