

"Math Is Cool" Championships — 2017-18

4th Grade — March 16, 2018

Team Contest

1	What digit is in the hundreds place of the number 123,450.7896?
2	Sydney has 45 cookies to share with her 9 friends. Sydney, Eddy, and Kiara take 4 cookies each. If the rest of the friends each get an equal number of cookies, what is the smallest number of cookies that could be left over?
3	10 squares, 12 rectangles, 16 parallelograms, and no other polygons are drawn on a page. What is the least number of polygons that could be on that page?
4	A $4 \times 4 \times 4$ cube is built out of unit cubes and painted on all sides. The large cube is then broken into the unit cubes. How many of the unit cubes are not painted on any side?
5	Marlee is having a SpongeBob birthday party and wants to feed her guests SpongeBob macaroni. A box of SpongeBob-themed macaroni costs \$3.50. If Marlee has \$55 and each person eats half a box of macaroni, how many people can Marlee feed?
6	The numbers 21, 6, 16, 14, and 4 are separated into two groups such that the product of the numbers in the first group equals the product of the numbers in the second group. What is the product of the numbers in the first group?
7	Nicholas can eat a whole bag of N&Ns in 30 minutes. August can finish the same size bag of N&Ns in 20 minutes. If they eat from the same bag at the same time, how long does it take for them to finish a whole bag of N&Ns?
8	How many ways can Ella make change for \$0.75 if she only has quarters, dimes, and nickels?
9	Biff and Eho are racing up a 25-foot wall. Biff climbs at 8 inches per minute and Eho climbs at 10 inches per minute. If Biff has a 5 minute head start, by how many SECONDS does the winner beat the other?
10	How many total triangles (of any size) are in this artistic sketch of Pythagoras the Penguin? 