

Team ID: _____ Room number: _____
Student names: _____

#	Answer	Points (0/1)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Total:
Graders:

Problems

1. What is 603×399 rounded to the nearest 10,000?
2. Toy racecars come in 3 colors: denim blue, hotrod red, and sparkly yellow. Daniel wants to get 3 cars, but he wants to get at least 1 red car. How many different combinations of cars can Daniel get?
3. Olympic speed stacker Avery builds a cup tower, where each level has 1 less cup than the one below it. If Avery has 30 cups, how many levels are in the highest cup tower that she can build?
4. Angela's mom wants to buy between 70 and 106 cookies. If cookies come in packs of 12, how many different amounts of cookies can she buy?
5. Anthony has 3 slices of pizza that are $\frac{3}{16}$, $\frac{1}{8}$, and $\frac{5}{41}$ of a whole pizza respectively. If he eats the 2 biggest slices, what fraction of a whole pizza does he eat? Express your answer as a simplified fraction.
6. It takes Lucas 2 hours to paint a mural, and it takes Alan 6 hours to paint a mural. If Lucas and Alan work together, how many hours will it take for them to complete 10 murals?
7. Elina has 24 mittens in a box, from which she takes out individual mittens at random. If she has 3 red pairs, 4 yellow pairs, and 5 blue pairs, how many individual mittens does she need to take from the box to make sure she has at least one pair of yellow mittens?
8. Aquaman measures distance in terms of a unit "sharks" inspired by the length of his favorite animal, the great white shark. To test his new measurement, system he finds that a 56ft long bus is 4 "sharks" long. Aquaman has a soccer field that has dimensions of 280ft by 350ft. What is the area of the soccer field in square "sharks?"
9. Mr. MacIntyre orders 15 small polo shirts, 29 medium polo shirts, and 26 large polo shirts for his band. However, the band includes 27 people that are size small, 30 people that are size medium, and 13 people that are size large. If small people cannot wear large polo shirts and large people cannot wear small polo shirts, what is the least possible number of people in the band wearing the wrong size of shirt?

10. A kind sorcerer has a sheet of magic gold leaf paper that is easy to rip.

- First, he gave away half of the sheet, plus an extra half of a square inch of the sheet to nearby pandas.
- Then, he gave away a third of the remaining sheet, plus a third of a square inch of the sheet to nearby dolphins.
- Then, he gave away a fourth of the remaining sheet, plus a fourth of a square inch of the sheet to nearby bunnies.

He now has 8 square inches of magic gold leaf paper. How many square inches of gold leaf paper did he originally have?

Solutions

1. 240,000
2. 6
3. 7
4. 3
5. $\frac{5}{16}$ (equivalent non-simplified fractions or decimals accepted)
6. 15
7. 18
8. 500
9. 25
10. 35