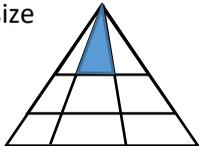
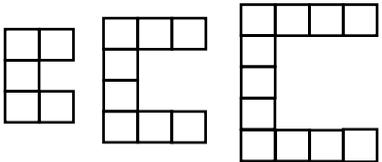
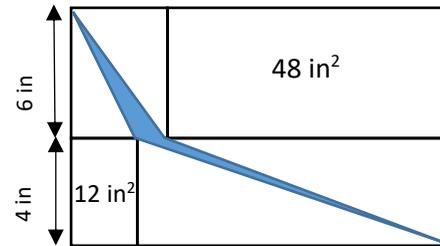


5 POINTS	
1.	The total cost of a Pokémon ball and a Pokémon card is \$12.90. The Pokémon ball costs \$3.10 more than the Pokémon card. What is the cost of the Pokémon ball? 
	A. \$4.90 B. \$8 C. \$9.80 D. \$3.10 E. \$10.20
2.	Jerry has a 23 inches long wire. Using the wire, he wants to make the biggest possible square, where the sides are counting numbers. What is the length of the wire that he must use to form this square?
	A. 5 in B. 25 in C. 20 in D. 10 in E. 22 in
3.	If you open any book, the adjacent pages would be consecutive numbers. For example, 22 and 23. Bohan opened a Harry Potter book and the product of the page numbers is 2550. Which two pages did he open?
	A. 17, 25 B. 10, 255 C. 40, 41 D. 50, 51 E. 60, 61
4.	Caitlin loves roses. In her rose garden, she has half as many pink roses as red, and four times as many red ones as white. Twenty of the roses are yellow, and there are 36 roses that are either yellow or white. How many roses are in Caitlin's garden?
	A. 144 B. 100 C. 122 D. 142 E. 132
5.	Study the figure on the right. What is the total number of triangles of any size which include the shaded triangle? 
	A. 9 B. 15 C. 12 D. 19 E. 18
6.	Which whole number is closest to $\frac{15+7}{6-3}$?
	A. 6 B. 7 C. 8 D. 3 E. 5
7.	Lance and Blanca had the same amount of savings. After Lance spent \$752 and Blanca spent \$38, Blanca had 8 times as much money as Lance had left. How much savings did Blanca have left?
	A. \$714 B. \$904 C. \$826 D. \$816 E. \$815
8.	Two overlapping circular papers cover an area of 178 square centimeters. The overlapped area is 54 square centimeters. What is the total area that the 2 circular papers can cover if they are not overlapped?
	A. 286 cm ² B. 232 cm ² C. 124 cm ² D. 205 cm ² E. 282 cm ²

7 POINTS	
9.	Olga buys a super swimming pass for the pool. For every three visits you'll get an extra free visit to the pool. If she buys the pass for 9 visits, how many times can she go swimming to this pool?
	A. 13 B. 12 C. 15 D. 11 E. 14
10.	Andy uses identical square tiles to make the following figures. If he continues the same pattern, how many tiles will there be in 11 th figure? 
	A. 30 B. 33 C. 32 D. 35 E. 37
11.	A school must buy at least 111 protractors. The protractors are sold in packs of 5 which cost \$6 per pack or packs of 7 which cost \$7 per pack. What is the lowest cost possible at which the school can buy the protractors, without having extra protractors?
	A. \$117 B. \$115 C. \$121 D. \$129 E. \$122
12.	Find a fraction that is $\frac{1}{4}$ way from $\frac{1}{12}$ and $\frac{3}{4}$ way from $\frac{13}{12}$?
	A. $\frac{1}{4}$ B. $\frac{5}{12}$ C. $\frac{1}{3}$ D. $\frac{3}{4}$ E. $\frac{5}{6}$
13.	At Emma's farm, $\frac{2}{11}$ of the animals are ducks and $\frac{7}{9}$ of the remainder animals are chickens. The rest are cows. If there are a total of 720 ducks and chickens at Emma's farm, find the total number of animals.
	A. 880 B. 860 C. 960 D. 920 E. 820
14.	What is the greatest even whole number with all different digits, and the product of its digits is 24?
	A. 4321 B. 8642 C. 8104 D. 4312 E. 6212
15.	Mrs. Duncan's class and Mr. Smith's class have a total of 72 students. $\frac{1}{4}$ of the students in Mrs. Duncan's class and $\frac{2}{5}$ of the students in Mr. Smith's class are boys. The number of girls in Mrs. Duncan's class is equal to the number in Mr. Smith class. Find the total number of girls in the two classes.
	A. 24 B. 48 C. 36 D. 42 E. 54

10 POINTS

16. As shown in the picture, the big rectangle consists of four smaller rectangles with the areas of 12 in^2 , 24 in^2 , 36 in^2 and 48 in^2 respectively. If all the lengths, in inches, of the rectangles are integers what is the area of the shaded region?



Picture is not drawn to scale

- A. 10 in^2 B. 8 in^2 C. 7 in^2 D. 5 in^2 E. 9 in^2

17. There is a 5-digit number that is divisible by 9 and 11. If the first, the third and the fifth digits are removed, it becomes 35. If the first three digits are removed, it becomes a 2-digit number that is divisible by 9. If the last 3 digits are removed, it becomes a 2-digit number that is also divisible by 9. What is the third digit?

- A. 3 B. 6 C. 9 D. 0 E. 5

18. A 60 inches wooden stick has marks that split it into 10 inches identical parts. It also has marks that splits it into 12 inches identical parts. If this stick was cut along all those marks, how many pieces of wooden stick will be obtained?

- A. 22 B. 9 C. 11 D. 10 E. 12

19.  Alvin the Chipmunk lies on Fridays, Saturdays and Sundays. He tells the truth on all other days. Simon the Chipmunk lies on Tuesdays, Wednesdays, Thursdays. He tells the truth on all other days. On what day do they both said, "Yesterday I lied."

- A. Tuesday B. Friday C. Thursday D. Monday E. Saturday

20. 11 oranges and 12 apples cost \$19.90 altogether. An orange and an apple together cost \$1.75. What is the difference in the cost of one apple and one orange?



- A. \$1.10 B. \$0.88 C. \$1.65 D. \$0.10 E. \$0.45

MATH CHALLENGE TOURNAMENT MASTERS

April 21, 2018



Problem Solving Challenge

Grade 4

Problem 1 – 20

Do not begin until you are instructed to do so.

Problem Solving Challenge (40 minutes)

You may use scratch paper to do any calculation to reach final answers.

Mark your answers in the ANSWER SHEET.

You have 40 minutes to complete the Problem-Solving Challenge