## **2024 Grade Two Spirit of Math Contest Solutions**

1) **C** Regroup the numbers to make the question easier to solve:

$$4+3+6-5+7$$
 $= 4+6+3+7-5$ 
 $= 10+10-5$ 
 $= 15$ 

- 2) **B** Since Anthony is 14 and Alice is half his age, then Alice is  $14 \div 2 = 7$  years old.
- 3) A The numbers arranged from least to greatest are: 4, 6, 13, 19, 22. Therefore, 19 is the second largest number.
- 4) **C** Rephrase the question; "All the cars are green except 6." Therefore, 15-6=9 of them are green.
- 5) **D** There are two people in front of Betty and three behind. The total number of people in the line is 2 + 3 + 1 (Betty) = 6 people.
- 6) **B** Work backwards. Two days before June 25th is June 23rd. Four days after June 23rd is June 27th. Therefore, Terry's prom is on June 27th.
- 7) **C** A square has 4 sides, a triangle has 3 sides, and a rectangle has 4 sides. The total number of sides is 4 + 3 + 4 = 11 sides.
- 8) **D** The pattern is created by adding 1 to the first number, then 2 to the second number, 3 to the third number, then 4 to the fourth number and so on. So, add 5 to the next number to get 12 + 5 = 17.
- 9) A Including Manuel, there are 6 people who will share the chocolate bar. To get 6 pieces Manuel must make 5 parallel cuts.
- 10) A A) "How much is one nickel worth?" is the first logical question you should ask to help solve the problem.
  - B) "How much is a dime worth?" does not help since Gauss didn't find any dimes.
  - C) "How many coins did he find?" is given in the question.
  - D) "What colour is the couch?" does not help to solve the question
- 11) **B** Since Tom started at the top of page 5, he didn't read 4 pages. Therefore, Tom read 38 4 = 34 pages.
- 12) **B** The total amount of money between all three people is \$2 + \$4 + \$3 = \$9. Each person gets \$3 dollars since  $9 \div 3 = 3$ .
- There are 13 students with brown eyes, 6 students with green eyes, and 8 students with blue eyes. There are 6+8=14 students, with eyes that aren't brown. Since 14 is more than 13, there are more students with an eye colour other than brown.
- Dogs have four legs and people have two legs. Three dogs have  $3 \times 4 = 12$  legs and four people have  $4 \times 2 = 8$  legs. So, Oscar counted 12 + 8 = 20 legs.

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- 16) **D** There are 7 days in a week. So, Ms. Tsang makes  $4 \times 7 = 28$  bracelets in one week and  $28 \times 2 = 56$  bracelets in two weeks.
- 17) **C** Each of the ten players plays against nine other players. That is  $10 \times 9 = 90$  games. However, each game has been counted twice, so the total is  $90 \div 2 = 45$  games.
- 18) **D** 17, 2, 37 is the only option with all prime numbers. The other options contain either composite or special numbers (9 in option A, 1 in option B, and 15 in option C).
- 19) **B** If each of the 12 animals has at least two legs, so  $12 \times 2 = 24$  legs are accounted for. There are 36 24 = 12 legs left that belong to cows. Each cow needs 4 2 = 2 more legs added to the two already there, so  $12 \div 2 = 6$  of Alla's animals are cows.
- 20) **C** Draw a diagram:

A	В	С	D
	Е		F
G		Н	

# of	Name	# of
Letters		Rectangles
	A, C, D, E, F, H, I	7
2	CD, DF, EG, FI, HI	5
3	BCE, DFI	2
5	BCDEF	
6	ABCEGH	
9	ABCDEFGHI	1
Total		17