

2017-2018 Puzzle Contests

Solutions for Contest #5



Grades K-5 Puzzle Solutions:

- 1. In the spy's instruction for coding secret messages, 8-22-5-22-6 stands for seven and 7-4-12 stands for two. How is 10 written in this code? (25 pts)**

Answer : **7-22-6.** It is a substitution cryptogram in which letters are substituted for numbers, i.e. 8=s, 22=e, 5=v, 6=n, 7=t, 4=w, 12=0. Then 10(ten)=7-22-12

- 2. Write 100 using all digits 1, 2, 3, 4, 5, 6, 7, 8, 9 and "+" and/or "-" signs (you can use each digit only once, and you must use every digit). Find at least three solutions (35 pts)**

Answer : The possible solutions are

$$12 + 3 - 4 + 5 + 67 + 8 + 9 = 100$$

$$123 + 4 - 5 + 67 - 89 = 100$$

$$123 - 45 - 67 + 89 = 100$$

- 3. Clowns Bam, Bim and Bom wear red, blue and green shirts at the spring circus show. Their shoes also are in these three colors. Bim's shoes and shirt are the same color. Bom's shoes and shirt are not red. Bam's shoes are green, but his shirt is not. What are the colors of Bom's and Bim's shoes and shirt?(40 pts)**

Answer: Bim's shoes and shirt are Red, Bom's shoes are blue and his shirt is green