

2013 BCCTM 5th grade Team Question #1

Biff had a \$1 bill, a \$2 bill, a \$5 bill, a \$10 bill, a \$20 bill, and a \$50 bill. Biff had 6 jars where he kept his money, with exactly one bill in each jar. Eho found five of these jars and took all the money from them. He kept these bills, but put a \$2 bill in each of 3 of these jars and a \$10 bill in each of the other 2 jars from which he had taken money. Now Eho has \$42 more than he had to start with. How many dollars are in the jar Eho did not find?

2013 BCCTM 5th grade Team Question #2

On Math Island, the town of Linear requires bicycles to have licenses to be ridden on Pythagoras Street. The license plates are 3 numbers followed by one letter. Zero and the letter “O” are not allowed to be used. Repeating of numbers is okay. How many different license plates can be made?

2013 BCCTM 5th grade Team Question #3

Water increases in volume by 4% when frozen. I pour 325 cubic centimeters (cc) of water into a container that holds 500 cc. I then freeze this water. What is the empty volume remaining in the container, in cubic centimeters?

2013 BCCTM 5th grade Team Question #4

What is the mean of all composite numbers between 15 and 21? (Not including 15 and 21)

2013 BCCTM 5th grade Team Question #5

Chess is a 2-person game. At a chess tournament, each competitor played a game of chess with each other competitor once. The total number of chess games was odd. If there were at least 9 but no more than 16 competitors at the tournament, how many different numbers of competitors are possible?

2013 BCCTM 5th grade Team Question #6

A monthly calendar is laid out as usual with 7 columns labeled Sunday through Saturday, and with as many rows as needed for that month. The sum of the numbers in a single column of the calendar for a certain month is even. What is the largest that sum could be?

2013 BCCTM 5th grade Team Question #7

I am thinking of two counting numbers. One number has 2 digits and the other has three digits. The difference between the two numbers is one. What is the sum of the two numbers?

2013 BCCTM 5th grade Team Question #8

Jill's mother limited her Nintendo playing to 10 hours per week. She played on only four days, a different amount of time each day. On Saturday, she played twice as much as on Wednesday. She didn't play on Monday, Tuesday, or Thursday. On Friday, she played the least of the days she played. If the times were all different and there were not any partial hours, how many hours did she play on each day?