

SIGMA

MIDDLE / JUNIOR HIGH MATHEMATICS LEAGUE

CONTEST NUMBER 1

GRADE 6

NAME: _____

SCORE : _____

TIME: 30 minutes

ANSWER COLUMN

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| <p>1. A recent report stated that the five most popular ice cream flavors are Vanilla (26%), Chocolate (12.9%), Neopolitan (4.8%), Strawberry (4.3%) and Cookies 'n' Cream (4%). What percent of the people prefer a flavor different from these five flavors?</p> | |
| <p>2. Let $a + b + c + d = 22$, $a + c = 10$, and $d = 5$. What is the value of b?</p> | |
| <p>3. A pound is 16 ounces. Nine pennies weigh one ounce. How many pennies make two pounds?</p> | |
| <p>4. Let a and b be digits of a three-digit number "$\overline{6ab}$." What is the largest two-digit number "\overline{ab}" if "$\overline{6ab}$" is to be divisible by 4?</p> | |
| <p>5. According to the Musgrave Pencil company the average pencil can be sharpened 17 times (if sharpened well) and will draw a line 35 miles long. How many times will I have to sharpen my pencil if I draw a line around a 440 yard (one-fourth of a mile) track?</p> | |
| <p>6. How many two-digit positive integers less than 50 have the units digit greater than the tens digit?</p> | |
| <p>7. A digital clock displays 1 or 2 digits for the hours and 2 digits for the minutes. Between the hours of 1:00 p.m. and 2:00 p.m. how many three-digit displays will represent a perfect square number?</p> | |
| <p>8. Rock Falls and the following towns are located along highway 30 in the U.S. The town of Columbus is west of Rock Falls. Ames is east of Columbus but west of Rock Falls. Lexington is east of Rock River but west of Columbus. Which town is farthest west?</p> | |