2008 Shoreline Math Olympiad
Mental Math Questions

4th Grade   Test #1

1. Take 12, multiply by 3, divide by 2, then add 7. What is your answer?

2. When two people shake hands with one another, that counts as one ‘handshake’. Every person in a room shakes hands with each other person in the room exactly once. There is a total of 15 ‘handshakes’ that take place. How many people are in the room?

3. What is one-third of two-fifths?

4th Grade   Test #2

1. Rachel left home for school at 7:45 one morning. She returned home at 4:05 that afternoon. How many hours and minutes was she gone total?

2. The number 6 has exactly four different factors: 1, 2, 3, and 6. How many natural numbers less than 15 have exactly two different factors?

3. How many cups in a gallon?

5th Grade   Test #1

1. Bob collects stamps. Each day he adds 4 stamps to his collection. At the end of three days he has 50 stamps. How many stamps does he have at the end of 10 days?

2. List all natural numbers which divide into 22, leaving a remainder of 4 each time.

3. If Mrs. Murphy separates her class into groups of 4 students each, 1 student is left over. If she separates her class into groups of 5 students each, 2 students are left over. What is the smallest number of students the class could have?

5th Grade   Test #2

1. A wooden cube is 3 inches long on each side and has its exterior painted red. If the cube is cut into smaller cubes 1 inch long on each side, how many of the smaller cubes have exactly two red faces?

2. Suppose today is Tuesday. In all, how many Fridays are there in the next 53 days?

3. The number 6 has exactly four different factors, or divisors; 1, 2, 3 and 6. How many different factors does the number 36 have?