

Name: _____ School: _____

Des Moines Math Circle Contest - 5th Grade

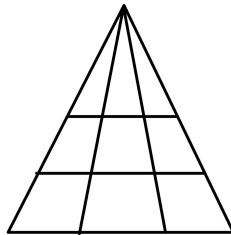
November 2024

Correct answers are worth 1 point. Incorrect and blank answers are worth 0 points. You are given 30 minutes to complete the test and no calculators are allowed.

1. _____ Mr. Bradshaw gives the class a pattern: 1, 1, 2, 3, 5, 8, 13. What is the 10th number in this sequence?

2. _____ How many two-digit prime numbers (divisible by only 1 and itself) have 3 as one of the digits?

3. _____ How many triangles are in the figure below?



4. _____ Suppose you're playing a game with Donnie. He thinks of some random positive integer and you're supposed to guess what it is. He says that the number is divisible by 20 and 35. What is the largest number that must divide Donnie's secret number?

5. _____ What is 10% of $\frac{1}{3}$ of 33?