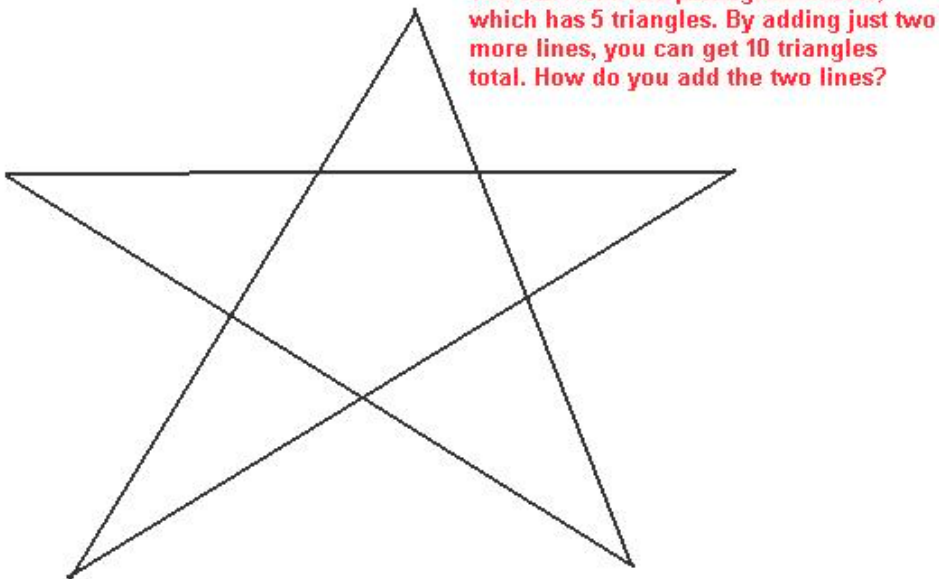First Day Puzzlers

When you think you have an answer, have a member of your group go up to Mr. Anderson and have it checked. You probably will not be able to solve every problem and don't get stuck on the tricky ones. Oh yea, and the ones that look tricky may not be, and vice versa.
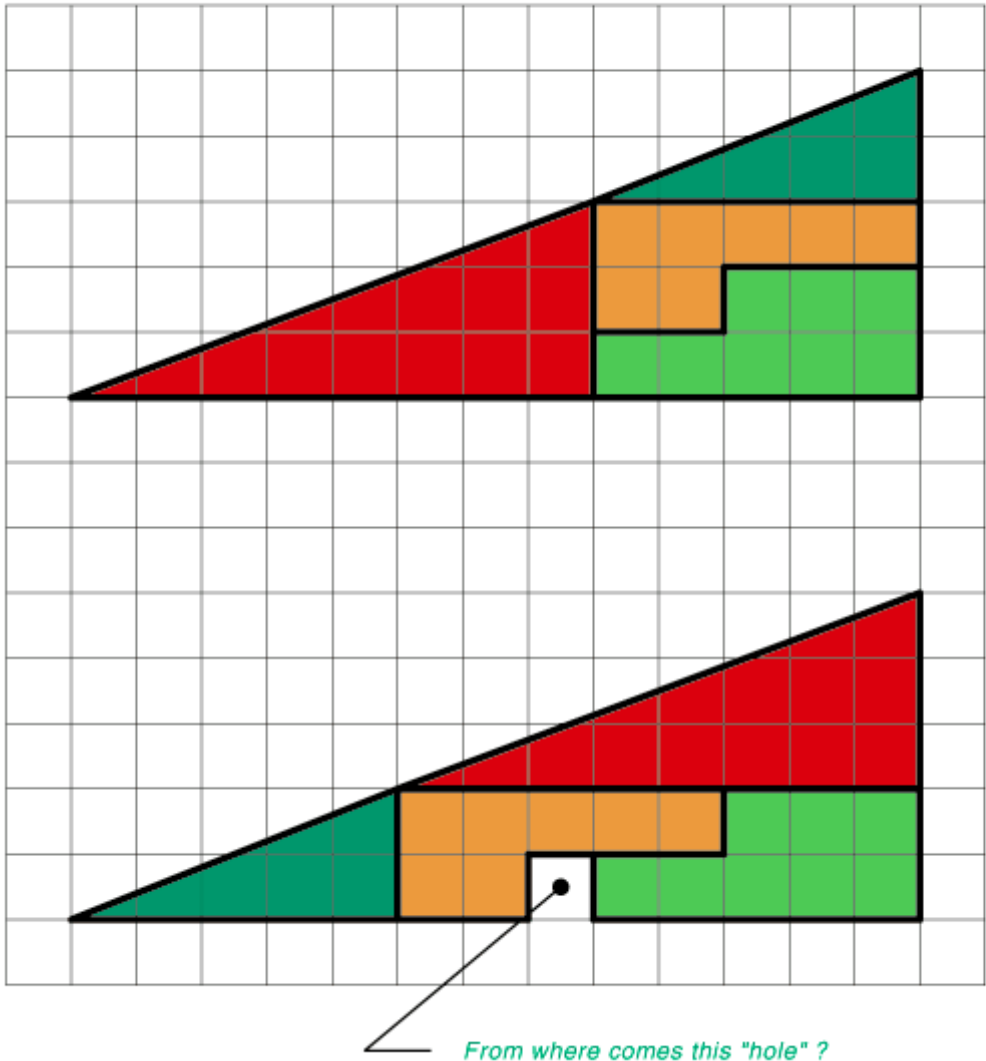
1. Two friends decide to get together; so they start riding bikes towards each other. They plan to meet halfway. Each is riding at 6 MPH. They live 36 miles apart. One of them has a pet carrier pigeon and it starts flying the instant the friends start traveling. The pigeon flies back and forth at 18 MPH between the 2 friends until the friends meet.
How many miles does the pigeon travel?

2. Find the units digit of the product of the first 200 prime numbers.

3. 2520 is the smallest number that can be divided by each of the numbers from 1 to 10 without any remainder.
What is the smallest positive number that is evenly divisible by all of the numbers from 1 to 20?

4. The prime factors of 13195 are 5, 7, 13 and 29. Find the prime divisors of 5,251.

5.

You start with the pentagram below, which has 5 triangles. By adding just two more lines, you can get 10 triangles total. How do you add the two lines?

6. There are three boxes. One is labeled "APPLES" another is labeled "ORANGES". The last one is labeled "APPLES AND ORANGES". You know that each is labeled incorrectly. You may ask me to pick one fruit from one box which you choose.
   How can you label the boxes correctly?

7.

HOW CAN THIS BE TRUE ?

Below the four parts are moved around

The partitions are exactly the same, as those used above

From where comes this "hole" ?

8. What's unique about the following paragraph?
   "**This is an unusual paragraph. I'm curious as to just how quickly you can find out what is so unusual about it. It looks so ordinary and plain that you would think nothing was wrong with it. In fact nothing is wrong with it. It is highly unusual though, study it and think about it but you still may not find anything odd. But if you work at it a bit you might find out. Try to do so without any coaching.**"