Chapel Hill Math Circle
Beginners Group (1-3)
March 5, 2016

1. How many triangles are there whose sides are whole numbers such that the perimeter equals 7 units?

2. AB and BA represent two-digit numbers that have the same digits in reverse order. What numbers are AB and BA if we know that their difference is 54 and A+B = 8?

3. A crocodile-infested moat surrounds a castle. The moat is 5 meters wide on all sides of the castle. The drawbridge just broke but you were able to salvage two logs that are exactly 5 meters long. How could you place the logs so that people can cross over the moat safely?